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ABSTRACT

This document, the second of two volumes, completes the report of a Lilly Endowment, Inc. funded project whose major objective was to establish a process for both teachers and students to be involved in the field testing or evaluation of microcomputer software. Workshops were held in nine Indiana school corporations where more than 2,300 students and 290 teachers completed evaluations of over 135 selected microcomputer programs. The programs were instructional in nature and included various formats: drill and practice, tutorial, simulations, and educational games. Included in this volume are the results of the field testing during the second year of the project, revised evaluation forms, and the methodology that can be adopted by teachers. The contents include: (1) a list of programs by subject areas; (2) a list of programs by grade level; (3) the evaluations for 77 software programs; (4) a step-by-step process for the effective selection of microcomputer software; (5) a methodology for teacher and student evaluation of software; (6) questions and answers from an analysis of the data; (7) recommendations of sources for computer software; and (8) revised evaluation forms. Each software program evaluation lists the title, intended audience and curriculum level, instructional method, producer and/or distributor, stated objectives, teacher evaluation, positive and negative comments, teacher overall rating, comments on program utilization, and student evaluation. (JB)

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A LILLY LINKAGE PROJECT

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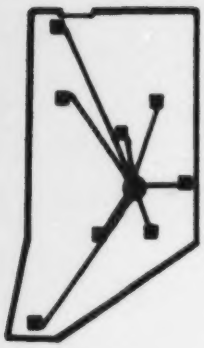

TEACHER AND STUDENT FIELD TESTING OF MICROCOMPUTER SOFTWARE

Volume Two *May 1985*

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REVISED EVALUATION FORMS
TESTED METHODOLOGY

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NORTHWESTERN CONSOLIDATED SCHOOL DISTRICT (Shelby County, Fairland, IN)
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TEACHER AND STUDENT FIELD TESTING OF MICROCOLMPUTER SOFTWARE

Volume Two
with revised evaluation forms and methodology

May 1985

Project Director:
Daniel Callison, Assistant Professor at Indiana University, Bloomington, IN.

Project Coordinator:
Gloria Haycock, Director of Media Services, Northwestern Consolidated School District, Fairland, IN.

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This publication and its distribution was made possible by funds granted by the Lilly Endowment, Inc. of Indianapolis, IN.
Comments concerning the contents of this publication should be addressed to Daniel Callison, SLIS 029, Indiana University, Bloomington, IN 47405 or to Gloria Haycock, Triton High School, RR1, Fairland, IN 46126.

Consultant:
Mike Olds, Indiana Clearinghouse for Computer Education, Indiana University and Purdue University at Indianapolis and representative to the Educational Software Evaluation Consortium, California State Department of Education.

Workshop Site Contacts and Coordinators for this volume of reviews:

Gloria Haycock, Media Director, Northwestern Consolidated Schools, Fairland, IN.

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NORTHWESTERN CONSOLIDATED SCHOOL DISTRICT OF SHELBY COUNTY

and

THE INDIANA UNIVERSITY SCHOOL OF LIBRARY AND INFORMATION SCIENCE

Evaluation of Microcomputer Software

The major objective of this project was to establish a process for both teacher and students to be involved in the field testing or evaluation of microcomputer software. The project, which was conducted by Northwestern Consolidated School District in cooperation with the Indiana University School of Library and Information Science, also offered an opportunity to gather teacher and student opinions for use by other educators. A method also was developed for continued software evaluation beyond the project.

Workshops were held in nine Indiana School Corporations where more than 2,300 students and 290 teachers completed evaluations for over 135 selected microcomputer programs. The programs were instructional in nature and included various formats: drill and practice, tutorial, simulations, and educational games.

Teachers evaluated programs matching their subject expertise. Included were classroom teachers as well as those with specializations in reading, media, science, music, math and special education. Secondary school subjects were art, math, media-library, social studies, chemistry, music, foreign language, home economics, language arts, business and gifted education.

Even though the average rating given by students and teachers was very close, there is no correlation between student overall average ratings and teacher overall ratings. Without a project of this nature, this type of information would not have been available. When Spearman's rank order correlation coefficient was applied to a random sample, it was found that teachers and students were looking for different merits in a microcomputer program. Simulations involving a team effort, and a great deal of time, seemed to receive much higher ratings from students. "Helpful graphics" also seemed to influence high student ratings. Teachers tended to rate much higher than did students, programs which were tutorials matching to established curriculum.

Two volumes of teacher and student reviews of current microcomputer software evaluations were produced with Volume I printed in August, 1984, and Volume II in April, 1985. Copies of Volume I were made available through all Area Library Service Authorities throughout Indiana as well as the Indiana Clearinghouse for Computer Education, I.U.P.U.I., 902 West New York, Indianapolis, Indiana 46223. Volume II is also available from these sources and members of the Association for Indiana Media Educators.

As a result of the first volume, a national evaluation group, the Educational Software Evaluation Consortium, invited a representative of the Lilly Project to participate in the building of a national evaluation base for microcomputer educational software.

Mike Olds, a consultant with the Indiana Clearinghouse, represented the project at a meeting in San Francisco in December, 1984. The evaluations

completed at that time were placed in a pool with evaluations from 34 other sites from around the United States. The result has been a printout of over 600 educational programs which have been rated by this national consortium. Without the work generated through the Lilly Project, Indiana would not have been represented in this document. It has been requested that a representative be sent again next year.

Volume II, published in the spring of 1985, includes the results of the field testing during the second year of the project. Revised evaluation forms and the methodology that can be adopted by teachers and schools are also detailed.

The evaluations are being accepted into two other national databases as well. The Educational Product Institute (EPIE) will use the document to produce some of its future evaluations. The Digest of Microcomputer Software Evaluation, now in its third year of publication, will also be using some of the information.

Project Coordinator, Gloria Haycock, of the Northwestern Consolidated School District, Fairland, Indiana, and Dr. Daniel Callison, Project Director, School of Library and Information Science, Indiana University, Bloomington, Indiana, have made presentations to several groups throughout Indiana concerning the evaluation procedure used in the project and the methodology developed to continue similar evaluation of software by others.

In addition, two workshops on software evaluation were conducted at Triton Central High School, Fairland, Indiana, in the spring of 1984 with a total of 23 teachers participating. Ten of these participants received college credit for the workshop through the School of Library and Information Science, I.U., Bloomington.

The linkage grant has contributed greatly to the knowledge concerning the merits of evaluating microcomputer software, and the established linkages throughout the state and nation will prove to be of value to many educators.

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PROGRAM LISTING BY GENERAL SUBJECT AREAS

Title -- Grade Level -- Hardware

Computer Skills - Business - Typing

Hello Apple - 6-12 - Apple
Lollipop Dragon: Cursor - 1-5 - Apple
Lollipop Dragon: Function Key - 1-5 - Apple
Microcomputer Applications - 7-12 - Apple, TRS 80
Microtyping II - 6-12 - Apple
New Step by Step - 6-12 - Apple
Touch Typing Tutor - 4-10 - Texas Instruments

Foreign Language

French Achievement I - 8-12 - Apple
French Game - 8-12 - Apple
French Travel Vocabulary - 7-12 - Apple, IBM
Le Demenagement - 7-12 - Apple
Le Vocabulaire Francais - 7-12 - Apple, Commodore
Multi-Lingual Word Processor - 9-12 - Apple
Paris En Metro - 7-12 - Apple
Spanish Grammar Review - 7-12 - Apple
Un Repas Francais - 7-12 - Apple

Home Economics

Home Energy Savings - 9-12 - Apple, TRS 80
Pattern Layout Simulator - 8-12 - Apple
Place Setting - 6-12 - Apple

Language Arts - Reading - Spelling - Grammar

Comprehension Power - 4-6 - Apple
Compu-Spell - 4-8 - Apple
Crossword Magic - 2-12 - Apple
Decision Making - 3-6 - Apple
Effective Study Skills - 6-12 - Apple
English Our Language - 7-12 - Apple
Good Thinking - 4-10 - Apple
Grammar Examiner - 5-10 - Apple, Commodore, IBM
Kidwriter - 1-5 - Apple, Commodore, IBM
Library I.Q. - 7-12 - TRS 80
Main Idea - 4-9 - Apple
Mr. Readwell - 1-4 - Commodore
Nouns and Pronouns - 3-7 - Apple
Punctuation Progress - 3-6 - Commodore
Puzzler - 3-10 - Apple
Rhymes and Riddles - 3-6 - Apple, Commodore, IBM

Title -- Grade Level -- Hardware

Roots/Affixes - 3-8 - Apple
Stickybear ABC - 1-4 - Apple
Story Machine - K-4 - Apple, Commodore
Word Invasion - 2-6 - Apple, Commodore
Writing Competency - 7-12 - Apple, Commodore, TRS 80

Logic - Puzzles - Problem Solving - Memory

Factory - 3-9 - Apple, Commodore, TRS 80
Galaxy Search - 2-4 - Apple
Mindstretcher Series - 3-9 - Apple, Commodore
Rocky's Boots - 2-6 - Apple
Shell Games - 2-10 - Apple
Stickybear Shapes - 3-6 - Apple
Teasers for Tobbs - 3-10 - Apple
Visual Discrimination:Shapes - K-4 - Apple
Visual Memory - 1-4 - Apple, TRS 80

Math

Basic Math Competency Skill - 4-10 - Apple, Commodore, TRS 80
Clock - 1-8 - Apple
Fraction Factory - 2-7 - Apple
High School Math - 9-12 - TRS 80
Math Maze - 2-6 - Apple, IBM
Survival Math - 4-8 - Apple
Sweet Shop - K-4 - Apple

Music

Key Signatures - 5-12 - Apple
Music Theory - 6-12 - Apple
Piano Notes - 4-8 - Commodore

Science

Chemistry with a Computer - 10-12 - Apple, TRS 80
Discovering the Scientific Method - 8-12 - Apple
Earth and Its Composition - 2-4 - Apple, Commodore
General Chemistry - 8-12 - Apple
Motion Problems - 9-12 - TRS 80
Organic Chemistry: Alkanee - 10-12 - Apple
Organic Chemistry: Substitute - 10-12 - Apple
Our Bodies - 1-4 - Apple, Commodore
Our Solar System - 5-9 - Apple
Skeletal System - 6-12 - Apple, Commodore
Temperature Grapher - 9-12 - Apple
Volcanoes - 5-11 - Apple

Title -- Grade Level -- Hardware

Social Studies

Beginning Geography - 1-3 - Apple, Commodore
Lincoln's Decisions - 7-12 - Apple, TRS 80, Commodore
Map Reading - 4-9 - Apple
Meet the Presidents - 6-12 - Apple
Robot Odyssey I - 5-10 - Apple
U.S. Constitution Tutor - 7-12 - Apple
Unlocking the Map Code - 5-9 - Apple

PROGRAM LISTING BY GRADE LEVEL

Grade Level -- Title -- Subject -- Hardware

K-4 - Story Machine - Language Arts - Apple, Commodore
K-4 - Sweet Shop - Math - Apple
K-4 - Visual Discrimination: Shapes - Logic - Apple
1-3 - Beginning Geography - Social Studies - Apple, Commodore
1-4 - Our Bodies - Science and Health - Apple, Commodore
1-4 - Mr. Readwell - Language Arts - Commodore
1-4 - Stickybear ABC - Language Arts - Apple
1-4 - Visual Memory - Logic and Memory skills - Apple, TRS 80
1-5 - Kidwriter - Language Arts and Computer skills - Apple, Commodore, IBM
1-5 - Lollipop Dragon: Cursor - Computer skills - Apple
1-5 - Lollipop Dragon: Function Key - Computer skills - Apple
1-8 - Clock - Math - Apple
2-4 - Earth and Its Composition - Science - Apple, Commodore
2-4 - Galaxy Search - Logic, Language Arts - Apple
2-6 - Rocky's Boots - Logic - Apple
2-6 - Math Maze - Math - Apple, IBM
2-6 - Word Invasion - Language Arts - Apple, Commodore
2-7 - Fraction Factory - Math - Apple
2-10 - Shell Games - Logic - Apple
2-12 - Crossword Magic - Language Arts - Apple
3-6 - Decision Making - Language Arts and Logic - Apple
3-6 - Punctuation Progress - Language Arts - Commodore
3-6 - Rhymes & Riddles - Language Arts - Apple, Commodore, IBM
3-6 - Stickybear Shapes - Logic - Apple
3-7 - Nouns and Pronouns - Language Arts - Apple
3-8 - Roots/Affixes - Language Arts - Apple
3-9 - Factory - Logic and Problem Solving - Apple, Commodore, TRS 80
3-9 - Mindstretcher Series - Logic - Apple, Commodore
3-10 - Puzzler - Language Arts - Apple
3-10 - Teasers for Tobbs - Logic and Math - Apple
4-6 - Comprehension Power - Language Arts - Apple
4-8 - Compu-Spell - Language Arts - Apple
4-8 - Piano Notes - Music - Commodore
4-8 - Survival Math - Math - Apple
4-9 - Main Idea - Language Arts - Apple
4-9 - Map Reading - Social Studies, Math - Apple
4-10 - Basic Math Competency - Math - Apple, Commodore, TRS 80
4-10 - Good Thinking - Language Arts - Apple
4-10 - Touch Typing Tutor - Typing - TI
5-9 - Our Solar System - Science - Apple
5-9 - Unlocking the Map Code - Social Studies, Math - Apple
5-10 - Grammar Examiner - Language Arts - Apple, Commodore, IBM
5-10 - Robot Odyssey I - Social Studies - Apple
5-11 - Volcanoes - Science - Apple
5-12 - Key Signatures - Music - Apple
6-12 - Effective Study Skills - Language Arts - Apple
6-12 - Hello Apple - Computer skills - Apple
6-12 - Meeting the Presidents - Social Studies - Apple
6-12 - Microtyping II - Typing - Apple

Grade Level -- Title -- Subject -- Hardware

6-12 - Music Theory - Music - Apple
6-12 - New Step by Step - Computer skills - Apple
6-12 - Place Settings - Home Economics - Apple
6-12 - Skeletal System - Science - Apple, Commodore
7-12 - English Our Language - Language Arts - Apple
7-12 - French Travel Vocabulary - Foreign Language - Apple
7-12 - Le Demenagement - Foreign Language - Apple
7-12 - Le Vocabulaire Francais - Foreign Language - Apple, Commodore
7-12 - Library I. Q. - Language Arts - TRS 80
7-12 - Lincoln's Decisions - Social Studies - Apple, Commodore, TRS 80
7-12 - Microcomputer Applications - Business, Computer skills - Apple, TRS 80
7-12 - Paris en Metro - Foreign Language - Apple
7-12 - Spanish Grammar Review - Foreign Language - Apple
7-12 - Un Repas Francais - Foreign Language - Apple
7-12 - U. S. Constitution Tutor - Social Studies - Apple
7-12 - Writing Competency - Language Arts - Apple, Commodore, TRS 80
8-12 - Discovering the Scientific Method - Science, Logic - Apple
8-12 - French Achievement I - Foreign Language - Apple
8-12 - French Game - Foreign Language - Apple
8-12 - General Chemistry - Science - Apple
8-12 - Pattern Layout Simulator - Home Economics - Apple
9-12 - High School Math - Math - TRS 80
9-12 - Home Energy Savings - Home Economics, Social Studies, Math - Apple, TRS 80
9-12 - Motion Problems - Science, Math - TRS 80
9-12 - Multi-Lingual Word Processing - Foreign Language, Computer skills - Apple
9-12 - Temperature Grapher - Science - Apple
10-12 - Chemistry with a Computer - Science - Apple, TRS 80
10-12 - Organic Chemistry: Alkanee - Science - Apple
10-12 - Organic Chemistry: Substitute - Science - Apple

(6)

TEACHER AND STUDENT FIELD TESTING OF MICROCOMPUTER SOFTWARE

A Lilly Endowment Inc. Linkage Project

The Northwestern School District of Shelby County
The School of Library and Information Science IU

Gloria Haycock, Project Coordinator
Daniel Callison, Project Director

A Method for Evaluating Microcomputer Programs
for Use in Indiana Public Schools

Information presented to the Association of
Indiana Media Educators, State Conference,
Indianapolis, March 14-15 1985

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The Field Testing Process

Each evaluation site had a contact person who was responsible for working with teachers and hosting a workshop. The contact person organized the teacher requests for programs and scheduled distribution of the programs for field testing in the classroom by teachers and students. A teacher could reserve a program for up to two weeks. The teacher was free to give time to the testing as he or she felt possible. In some cases teachers involved up to thirty students and two or three of their fellow teachers. In other cases, only one teacher examined the program. In other cases no time was given to examine the program at all and it was returned without field testing.

The major objective of the project was to establish a process for both teacher and students to be involved in the field testing or evaluation of microcomputer software.

Other objectives included:
...gather teacher and student opinions into review summaries which could be made available to other educators
...develop a method for continued software evaluation beyond the project

Products of the project include:
...two volumes of teacher and student reviews of current microcomputer software and a methodology for software evaluation
Volume I printed in August 1984
Volume II printed in May 1985

Workshop contact people for the project were:

NORMA MILLER	Monroe County Public Schools
ANN HANES	Richmond Community Schools
DAVID FLOWERS	Ft. Wayne Community Schools
MIKE TRON	Evansville-Vanderburg Schools
MARY OPPMAN	Portage Township Schools
GLORIA HAYCOCK	Northwestern Consolidated
KAREN NIEMEYER	Carmel Clay Schools
JOANNE TROUTNER	Tippecanoe County Schools
SUZANNE SMITH	Jennings County Schools

Consultant:
MIKE OLDS Indiana Clearinghouse for Computer Education

Some Totals from the Two-Year Project

460 software programs were ordered, from which 135 were field tested.

2308 student evaluation forms were completed.

291 teacher evaluation forms were completed.

The teachers represented the following grades:

K	2%
1	9%
2	2%
3	14%
4	16%
5	14%
6	5%
7	9%
8	7%
9	5%
10	4%
11	8%
12	4%
	99%

An Even Distribution

Student evaluations also represented a similar distribution among grades. A majority of the programs were for grades 3 to 6. However, when compared to what is available in commerical software, and considering that teachers could volunteer to complete the field test exercise, we feel that we have a strong overall representation of all grade levels.

Programs were instructional in nature and included various formats: drill & practice, tutorial, simulation, and game.

Teachers evaluated programs matching to their subject expertise. Elementary teachers included classroom teachers as well as those with specializations in reading, media, science, music, math and special education. Secondary school subject areas represented included art, math, media-library, social studies, chemistry, music, foreign language, home economics, language arts, business, and special education (gifted).

TITLE: BASIC MATH COMPETENCY SKILL Cost: $ 122

Intended Audience: Grades 4-10 Curriculum: Math

Instructional Method: Drill Hardware: Apple, Commodore, TRS 80

Producer, Author, or Distributor: Educational Activities and Modular Educational Programs

Stated Objectives

Units include various levels of drill and situations in:
1) carrying in addition problems
2) borrowing in subtraction problems
3) measuring with a ruler: perimeter, circumference, area

TEACHER Evaluation

Two elementary school teachers (one fifth grade and the other special education) examined this program for 58 minutes each. Both had prior experience with microcomputer programs, one experience with ten or more.

POSITIVE Comments

"...tremendous graphics and easily understood..." "different levels and different topics make it very versatile..." "measurement section is excellent..." High grades were given for:
"verbal and graphic information is well paced and clear" "learner responses require thought and are a challenge"

NEGATIVE Comments

"...difficulty reading directions, if the student has a reading problem..." "The concepts were excellent; the use of two digit numbers in the area section were not necessary...one digit numbers would be just fine." Below average grades were given for:
"likely to arouse student interest" "program provides sufficient review without unnecessary redundancy"

TEACHER OVERALL RATING (from 0 to 100): 90

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"I would use this in conjunction with my measuring unit in fifth and sixth grade math...it breaks the concepts down very nicely."
"This program could be used for students who have been absent for an extended period and have missed lessons on the topics covered."

STUDENT Evaluation

Twenty-eight fifth, seventh and eighth graders examined this program for an average of 26 minutes each. Five had prior experience with ten or more programs and the rest had prior experience with fewer than three programs.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	86 / 77	56
b. I think this program is too hard.	12	14 / 7	2
c. The pictures (graphics) were helpful.	96	72	50 / 48
d. I got lost in this program and didn't know what to do.	28	14 / 12	0
e. I really had to think in order to get the right answer.	69	46 / 51	33
f. This program helped me when I made a mistake.	82	68 / 65	48
g. I got all the questions right on the first try.	54	50 / 32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	54 / 64	46
i. I would rather work on this program by myself than with other classmates.	69	57 / 53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	71 / 54	35
k. If I could, I would take this program home to use it.	89	71 / 69	49
l. I would rather do this program with a classmate than by myself.	64	47	39 / 30
m. This program was a waste of my time.	24	11 / 13	2
n. This program is too long.	32	14 / 19	6
o. I think my friends would enjoy this program.	96	79 / 77	58
p. I could not do this program without help from my teacher.	42	25 / 28	14
q. This program was too easy for me.	54	46 / 35	16
OVERALL STUDENT RATING	92	75 / 75	58

(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: BEGINNING GEOGRAPHY Cost: $ 18

Intended Audience: Grades 1-3 Curriculum:Social Studies

Instructional Method: Tutorial Hardware: Apple, Commodore

Producer, Author, or Distributor: Right On Programs

Stated Objectives

Teaches basic map skills and directions; symbols for rivers, mountains, cities, and more. A game follows the tutorial session.

TEACHER Evaluation

Three third grade teachers examined this program for five minutes each. All three had experience with ten or more programs.

POSITIVE Comments

"The directions are clear." "...a good job of showing symbols for map reading...easy to follow and the program is very short..."

High grades were given for:
"content of the program is accurate"
"learner responses require thought and are a challenge"

NEGATIVE Comments

"The plane was difficult to follow at times as it blended in with the symbols."
"The graphics did not look like a real map."
Average to below average grades were given for:
"likely to arouse student interest"
"verbal and graphic information is well paced and clear"
"program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 81

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"I would use it as a learning center for social studies or as a supplement to our reading series when we are working on map skills."

STUDENT Evaluation

Fifty-nine third graders examined this program for an average of eight minutes each. Fifty of the students indicated experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	56 **90**
b. I think this program is too hard.	12	7	2 **3**
c. The pictures (graphics) were helpful.	96	72	43 **83**
d. I got lost in this program and didn't know what to do.	28	12	0 **15**
e. I really had to think in order to get the right answer.	69	51	33 **73**
f. This program helped me when I made a mistake.	82	65	48 **80**
g. I got all the questions right on the first try.	54	32	10 **24**
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	46 **81**
i. I would rather work on this program by myself than with other classmates.	69	53	36 **71**
j. I would like to be graded by my teacher on the work I did with this program.	73	54	35 **69**
k. If I could, I would take this program home to use it.	89	69	49 **86**
l. I would rather do this program with a classmate than by myself.	64	47	30 **31**
m. This program was a waste of my time.	24	13	2 **12**
n. This program is too long.	32	19	6 **8**
o. I think my friends would enjoy this program.	96	77	58 **90**
p. I could not do this program without help from my teacher.	42	28	14 **41**
q. This program was too easy for me.	54	35	16 **59**
OVERALL STUDENT RATING	92	75	58 **83**

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: CHEMISTRY WITH A COMPUTER Cost: $ 150

Intended Audience: Grades 10-12 **Curriculum:** Science

Instructional Method: Drill and simulation **Hardware:** Apple, TRS 80

Producer, Author, or Distributor: Programs for Learning, Inc., and McKilligan

Stated Objectives

Package of eleven programs including: equilibrium constants, combined gas laws, solubility product calculations, gram-mole relationships, and introduction to qualitative analysis.

TEACHER Evaluation

One high school chemistry teacher examined this program for fifty minutes. The teacher indicated that he or she worked with five of the twelve programs for ten minutes each. The teacher had no previous experience with microcomputer programs.

POSITIVE Comments

The teacher gave high grades for:
"program is suited for its intended grade level" "content of the program is accurate" "documents and printed guides give sufficient support"

NEGATIVE Comments

The teacher noted, "Several different programs are set up well, but most of the programs use too many digits in their calculations; makes it harder to get the correct answer. Required two disc drives to run, which made access difficult...."

Below average grades were given for:
"program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 80

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"The programs are done well enough that they could be used for independent study."

STUDENT Evaluation

No student evaluations were completed for this program.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	56
b. I think this program is too hard.	12	7	2
c. The pictures (graphics) were helpful.	96	72	48
d. I got lost in this program and didn't know what to do.	28	12	0
e. I really had to think in order to get the right answer.	69	51	33
f. This program helped me when I made a mistake.	82	65	48
g. I got all the questions right on the first try.	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	35
k. If I could, I would take this program home to use it.	89	69	49
l. I would rather do this program with a classmate than by myself.	64	47	30
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	6
o. I think my friends would enjoy this program.	96	77	58
p. I could not do this program without help from my teacher.	42	28	14
q. This program was too easy for me.	54	35	16
OVERALL STUDENT RATING	92	75	58

(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: CLOCK Cost: $ 40

Intended Audience: Grades 1-8 Curriculum: Math

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: Hartley, Inc. (contact Sandra Nolan/ KELSO/ MARBAUGH of Indianapolis)

Stated Objectives

The program was designed to provide the practice a students needs to convert between digital time and clock time.

TEACHER Evaluation

Four teachers examined this program. One first grade teacher, two fourth grade teachers and one junior high school special education teacher averaged 30 minutes each with the program prior to completing an evaluation form. All of the teachers indicated prior experience with ten or more programs.

POSITIVE Comments

"...reinforces concepts of hour, half hour, quarter hour, and minutes..."
"I liked being able to have a choice of having the digital time displayed or not displayed. I also liked having the student responses recorded so I could look at the results at the end of the day."
Above average grades were given for:
"meets its own stated objectives" "suited for its intended grade level" "content of the program is accurate" "verbal and graphic information is well paced and clear" "clear evaluation of student's performance"

NEGATIVE Comments

"...tutorial section does not give directions..."
Average grades were given for:
"likely to arouse student interest"

TEACHER OVERALL RATING (from 0 to 100): 87

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"I would use this as supplement material; our fourth grade math textbook devotes one entire chapter to time and money...time seems to be a skill which needs more reinforcement."
"It would be great to use with special education students who still have difficulty telling time. The student could practice a targeted area such as reading clocks by the quarter hour or setting clocks by the minute."

STUDENT Evaluation

Ten first graders worked with the program for twenty minutes each. All had prior experience with at least six microcomputer programs. Eight of the students agreed, "I would like to do this program again." Eight agreed, "I think my friends in class would like to do this program." Nine agreed, "I could do this program without help from my teacher." All agreed, "I liked the pictures in this program."
Sixteen fourth graders examined this program for twenty minutes each. Two of the students had no prior experience with microcomputer programs; three had experience with two; five with five, and two with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

For the 16 fourth grade students:

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	56
b. I think this program is too hard.	12	7	2
c. The pictures (graphics) were helpful.	96	72	48
d. I got lost in this program and didn't know what to do.	28	12	0
e. I really had to think in order to get the right answer.	69	51	33
f. This program helped me when I made a mistake.	82	65	48
g. I got all the questions right on the first try.	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	35
k. If I could, I would take this program home to use it.	89	69	49
l. I would rather do this program with a classmate than by myself.	64	47	30
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	6
o. I think my friends would enjoy this program.	96	77	58
p. I could not do this program without help from my teacher.	42	28	14
q. This program was too easy for me.	54	35	16
OVERALL STUDENT RATING (rating given in points 0 to 100)	92	75	58
	HIGH	AVERAGE	LOW

TITLE: COMPREHENSION POWER Cost: $ 150

Intended Audience: Grades 4-6 Curriculum: Language Arts, Vocabulary

Instructional Method: Drill Hardware: Apple

Producer, Author, or Distributor: Milliken

Stated Objectives

Builds 25 skills in 12 lessons at three levels each. Vocabulary drill, main idea preview, reading, and questions are included. The following comprehension skills are treated in the questions which accompany each reading selection: literal understanding, interpretation, analysis, evaluation, and appreciation.

TEACHER Evaluation

Two third grade teachers evaluated this program after working with it for an average of 60 minutes each. Both teachers had prior experience with ten or more programs.

POSITIVE Comments

Both teachers commented, "...the feedback and evaluation of each student's performance is excellent and adds to the management of the class..."

High grades were given for:
"suited for its intended grade level" "meets its own objectives"
"verbal and graphic information is well paced and clear"
"provides sufficient review without unnecessary redundancy"

NEGATIVE Comments

"needs graphics to add interest and motivation..."

TEACHER OVERALL RATING (from 0 to 100): 90

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...use to supplement our reading program..."

STUDENT Evaluation

Nine third graders examined a lesson from this program for an average of 15 minutes each. All had prior experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	100 / 98	77	56
b. I think this program is too hard.	12	7	0 / 2
c. The pictures (graphics) were helpful.	96	72	22 / 48
d. I got lost in this program and didn't know what to do.	28	12	0 / 0
e. I really had to think in order to get the right answer.	69	51	11 / 33
f. This program helped me when I made a mistake.	100 / 82	65	48
g. I got all the questions right on the first try.	54	32	22 / 10
h. Compared to the other times I have studied this subject, this program was fantastic.	89 / 82	64	46
i. I would rather work on this program by myself than with other classmates.	89 / 69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	89 / 73	54	35
k. If I could, I would take this program home to use it.	78 / 89	69	49
l. I would rather do this program with a classmate than by myself.	64	47	22 / 30
m. This program was a waste of my time.	24	13	0 / 2
n. This program is too long.	32	19	0 / 6
o. I think my friends would enjoy this program.	89 / 96	77	58
p. I could not do this program without help from my teacher.	33 / 42	28	14
q. This program was too easy for me.	54	35	22 / 16
OVERALL STUDENT RATING	98 / 92	75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: COMPU-SPELL Cost: $ 40

Intended Audience: Grades 4-8 Curriculum: Language Arts, Spelling

Instructional Method: Drill and practice Hardware: Apple

Producer, Author, or Distributor: Edu-Ware Services

Stated Objectives

Compu-spell is an instructional computer system which employs perceptual principles and positive reinforcement to teach spelling. Spelling units allow the words to be displayed in a variety of textual formats. File-building routines allow user construction of totally customized units.

TEACHER Evaluation

Two fourth grade teachers examined this program for 30 minutes each. Both teachers had prior experience with ten or more programs.

POSITIVE Comments

"...the program is able to record the records of up to 60 students, and allows for various levels."

High grades were given for:
"meets its own objectives" "content of the program is accurate"
"documents and printed guides give sufficient support"

NEGATIVE Comments

"...format is too repetitive after working many levels."
Below average grades were given for:
"likely to arouse student interest" "verbal and graphic information is well paced and clear" "program provides sufficient review without unecessary redundancy" "learner responses require thought and are a challenge"

TEACHER OVERALL RATING (from 0 to 100): 63

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

Could be used with the special education class. The immediate recall feature would help here.
One teacher noted, "Compu-spell was much easier to use than Spellagraph, although Spellagraph has a more motivational game format.

STUDENT Evaluation

Twenty-two fourth and fifth graders examined this program for an average of 28 minutes each. The students had a wide variety of previous experience with microcomputer programs. Half had experienced fewer than four and eight had experienced ten or more programs prior to the evaluation.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	59 56
b. I think this program is too hard.	12	9 7	2
c. The pictures (graphics) were helpful.	96	72	41 48
d. I got lost in this program and didn't know what to do.	28	9 12	0
e. I really had to think in order to get the right answer.	69	51	41 33
f. This program helped me when I made a mistake.	82	64 65	48
g. I got all the questions right on the first try.	54	32 32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	59 46
i. I would rather work on this program by myself than with other classmates.	64 69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	55 54	35
k. If I could, I would take this program home to use it.	77 89	69	49
l. I would rather do this program with a classmate than by myself.	64	45 47	30
m. This program was a waste of my time.	23 24	13	2
n. This program is too long.	32 32	19	6
o. I think my friends would enjoy this program.	96	73 77	58
p. I could not do this program without help from my teacher.	41 42	28	14
q. This program was too easy for me.	54	32 35	16
OVERALL STUDENT RATING	92	65 75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: CROSSWORD MAGIC Cost: $ 63

Intended Audience: 2-12 **Curriculum:** Language Arts

Instructional Method: Creates a puzzle **Hardware:** Apple

Producer, Author, or Distributor: Total Infor Ed System

Stated Objectives

Crossword Magic will create a crossword puzzle for you by using your words and clues. Once created, your puzzle may be played on the screen or a hardcopy playable version can be produced with most graphic printers.

TEACHER Evaluation

Three junior high school language arts teachers and one senior high school media specialist examined this program for 30 minutes each. Two had prior experience with one microcomputer program, and two had prior experience with ten or more.

POSITIVE Comments

"...very easy to create puzzles...print out is very clear..."
"...very user friendly...clear directions..."
The program was given exceptionally high grades for:
"meets its own stated objectives" "likely to arouse student interest"

NEGATIVE Comments

TEACHER OVERALL RATING (from 0 to 100): 98

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...could be used by any teacher in the school for any subject...could be used to create tests..."
"...program is recommended over MECC Teacher Utility..."

STUDENT Evaluation

No student evaluations were completed for this program.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	56
b. I think this program is too hard.	12	7	2
c. The pictures (graphics) were helpful.	96	72	48
d. I got lost in this program and didn't know what to do.	28	12	0
e. I really had to think in order to get the right answer.	69	51	33
f. This program helped me when I made a mistake.	82	65	48
g. I got all the questions right on the first try.	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	35
k. If I could, I would take this program home to use it.	89	69	49
l. I would rather do this program with a classmate than by myself.	64	47	30
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	6
o. I think my friends would enjoy this program.	96	77	58
p. I could not do this program without help from my teacher.	42	28	14
q. This program was too easy for me.	54	35	16
OVERALL STUDENT RATING	92	75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: DECISION MAKING Cost: $33

Intended Audience: Grades 3-6 Curriculum: Logic, Reading, Language Arts

Instructional Method: Tutorial and Simulation Hardware: Apple

Producer, Author, or Distributor: Aquarius

Stated Objectives

This series of programs is designed to improve the student's reading and thinking abilities. The use of "real world" topics and a branching technique make these lessons suitable for the older (10-12), basic student. Students first read a fifth grade level paragraph and are given a comprehension question.

TEACHER Evaluation

Two middle school teachers in social studies and home economics examined this program for ten minutes each. One teacher had prior experience with ten or more programs and the other with five programs.

POSITIVE Comments

None given.

NEGATIVE Comments

"...boring...needs to be made more exciting..."
Below average grades were given for:
"likely to arouse student interest" "verbal and graphic information is well paced and clear" "feedback is consistent and provides remediation"

TEACHER OVERALL RATING (from 0 to 100): 70

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...could be used in elementary consumer education..."

STUDENT Evaluation

Sixteen ninth graders examined this program for an average of six minutes each. Six had no prior experience with microcomputer programs; three had experience with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

		HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	a.	98	77	38 56
b. I think this program is too hard.	b.	12	6 7	2
c. The pictures (graphics) were helpful.	c.	96	72	38 48
d. I got lost in this program and didn't know what to do.	d.	28	6 12	0
e. I really had to think in order to get the right answer.	e.	69 69	51	33
f. This program helped me when I made a mistake.	f.	82	75 63	48
g. I got all the questions right on the first try.	g.	54	19 32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	h.	82	56 64	46
i. I would rather work on this program by myself than with other classmates.	i.	69	56 53	36
j. I would like to be graded by my teacher on the work I did with this program.	j.	73	75 54	35
k. If I could, I would take this program home to use it.	k.	89	69	50 49
l. I would rather do this program with a classmate than by myself.	l.	64	44 47	30
m. This program was a waste of my time.	m.	24	13 13	2
n. This program is too long.	n.	32	19	6 6
o. I think my friends would enjoy this program.	o.	96	77	56 58
p. I could not do this program without help from my teacher.	p.	42	25 28	14
q. This program was too easy for me.	q.	54	44 33	18
OVERALL STUDENT RATING		92	60 75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

(23)

TITLE: DISCOVERING THE SCIENTIFIC METHOD Cost: $ 51

Intended Audience: Grades 8-12 Curriculum: Science

Instructional Method: Simulation & Tutorial Hardware: Apple

Producer, Author, or Distributor: Focus Media

Stated Objectives

A) Define the terms HYPOTHESIS and ANALYSIS; B) ORGANIZE DATA into simple categories; C) RECORD the RESULTS of experiments; D) DRAW CONCLUSIONS from recorded data; E) MAKE GENERALIZATIONS from their conclusions.

TEACHER Evaluation

Three junior high science teachers and one junior high school media specialist examined this program for an average of 66 minutes each. Two of the teachers had prior experience with two microcomputer programs, and one teacher and the media specialist had prior experience with ten or more programs.

POSITIVE Comments

"...repetition of the major concepts through a game-like approach..."
"It is a challenge...thinking skills are required."
High grades were given for:
"content of the program is accurate" "relevant practice or testing is consistently provided" "the instructional approach used suits the program's content"

NEGATIVE Comments

"After a given number of wrong answers, the data table should be re-shown, with hints. Although 'right answers' are not as important as thinking, the frustrated student may want to re-think the initial hypothesis and have a fresh start."
Average grades were given for:
"likely to arouse student interest" "verbal and graphic information is well paced and clear" "program provides a clear evaluation of the student's performance."

TEACHER OVERALL RATING (from 0 to 100): 90

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"This material would probably be best at the beginning of the school year, before the lab-investigations begin. This could also be used before the experiment design stage of the science fair."
"I would really like to use this in a group situation...with each student individually filling out a worksheet."
All agreed, "This microcomputer program supports and enhances my current materials and would provide basic support to the instruction of the skills I require of my students."

STUDENT Evaluation

Twelve seventh graders examined this program for an average of 42 minutes each. Three of the students had no prior experience with microcomputer programs; two had prior experience with one program; and two had prior experience with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	92	98 77	56
b. I think this program is too hard.	17	12 7	2
c. The pictures (graphics) were helpful.	58	96 72	48
d. I got lost in this program and didn't know what to do.	0	28 12	0
e. I really had to think in order to get the right answer.	83	69 51	33
f. This program helped me when I made a mistake.	83	82 65	48
g. I got all the questions right on the first try.	8	54 32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	58	82 64	46
i. I would rather work on this program by myself than with other classmates.	25	69 53	36
j. I would like to be graded by my teacher on the work I did with this program.	8	73 54	35
k. If I could, I would take this program home to use it.	75	89 69	49
l. I would rather do this program with a classmate than by myself.	58	64 47	30
m. This program was a waste of my time.	8	24 13	2
n. This program is too long.	17	32 19	6
o. I think my friends would enjoy this program.	100	96 77	58
p. I could not do this program without help from my teacher.	25	42 28	14
q. This program was too easy for me.	0	54 35	16
OVERALL STUDENT RATING	78	92 75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: EARTH AND ITS COMPOSITION Cost: $18

Intended Audience: Grades 2-4 Curriculum: Science

Instructional Method: Tutorial Hardware: Apple, Commodore

Producer, Author, or Distributor: Right On Programs

Stated Objectives

"Introduction to the components that make up the earth, water, mountains, air, and volcanoes.

TEACHER Evaluation

One fourth grade teacher worked with this program for ten minutes.
The teacher had experience with ten programs prior to this evaluation.

POSITIVE Comments

"...not many programs available on this topic..."
The teacher gave high grades for:
"suited for its intended grade level" "meets its own stated objectives"

NEGATIVE Comments

"...no new information once program is run; graphics not as complex as some (programs)..."
Average to below average grades were given for:
"likely to arouse student interest"
"verbal and graphic information is well paced and clear"
"provides sufficient review without unnecessary redundancy"
"feedback is consistent and provides remediation"

TEACHER OVERALL RATING (from 0 to 100): 50

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

None given.

STUDENT Evaluation

Five fourth graders examined this program for an average of 6 minutes each. Two of the students had experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	100	77	56
b. I think this program is too hard.	12	7	0 / 2
c. The pictures (graphics) were helpful.	96	80 / 72	48
d. I got lost in this program and didn't know what to do.	28	20 / 12	0
e. I really had to think in order to get the right answer.	69	51	40 / 33
f. This program helped me when I made a mistake.	82	65	60 / 48
g. I got all the questions right on the first try.	54	40 / 32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	100 / 82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	20 / 36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	20 / 35
k. If I could, I would take this program home to use it.	89	69	60 / 49
l. I would rather do this program with a classmate than by myself.	64	47	40 / 30
m. This program was a waste of my time.	24	20 / 13	2
n. This program is too long.	32	20 / 19	6
o. I think my friends would enjoy this program.	96	80 / 77	58
p. I could not do this program without help from my teacher.	42	28	20 / 14
q. This program was too easy for me.	54	35	0 / 16
OVERALL STUDENT RATING	92	75	46 / 58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: EFFECTIVE STUDY SKILLS Cost: $165

Intended Audience: Grades 6-12 Curriculum: Language Arts and Counseling

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: MCE, Inc.

Stated Objectives

A program which helps to determine how students learn most effectively and then uses the results to offer an instructional presentation to suit the individual's needs. Provides data on the student's needs and potential.

TEACHER Evaluation

One middle school reading teacher examined this program for 15 minutes. The teacher had prior experience with over ten programs.

POSITIVE Comments

"Lists good study habits for the individual student."
High grades were given for:
"program provides sufficient review without unnecessary redundancy"
"instructional approach suits the program's content"

NEGATIVE Comments

Average and below average grades were given for:
"likely to arouse student interest" "content of the program is accurate" "verbal and graphic information is well paced and clear" "learner responses require thought and are a challenge" "program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 85

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

The teacher agreed, "This microcomputer program supports and enhances my current materials and would provide basic support to the instruction of the skills I require of my students."

STUDENT Evaluation

Six seventh graders examined this program for an average of 18 minutes each. Three of the students indicated no prior experience with microcomputer programs and one indicated experience with ten or more. One additional student, beyond the six completing evaluation forms, stopped the program after four minutes because he or she got bored.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	50 55
b. I think this program is too hard.	12	7	0 2
c. The pictures (graphics) were helpful.	96	72	67 48
d. I got lost in this program and didn't know what to do.	28	12	0 0
e. I really had to think in order to get the right answer.	69	51	0 33
f. This program helped me when I made a mistake.	82	65	33 48
g. I got all the questions right on the first try.	54	32	100 10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	17 46
i. I would rather work on this program by myself than with other classmates.	69	53	83 36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	67 35
k. If I could, I would take this program home to use it.	89	69	33 49
l. I would rather do this program with a classmate than by myself.	64	47	17 30
m. This program was a waste of my time.	24	13	50 2
n. This program is too long.	32	19	17 6
o. I think my friends would enjoy this program.	96	77	33 58
p. I could not do this program without help from my teacher.	42	28	0 14
q. This program was too easy for me.	54	35	67 16
OVERALL STUDENT RATING	92	75	63 58

(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: ENGLISH OUR LANGUAGE Cost: $34

Intended Audience: Grades 7-12 Curriculum: Language Arts

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: Careers, Inc.

Stated Objectives

Tutorials giving description and tests for the following areas: "Proper and Common Nouns," "Abstract and Concrete Nouns," "Collective and Concrete Nouns," "Personal Pronouns," "Indefinite Pronouns," "Proper, Comparative-Superlative Adjectives," "Action, Linking, Helping Verbs and Adverbs," "Simple Tense and Perfect Tense," and "Prepositions & Conjunctions."

TEACHER Evaluation

One high school media specialist evaluated this program. The media specialist had experience with eight programs prior to this evaluation. The media specialist worked with the program for 45 minutes.

POSITIVE Comments

"...scores student learning..."
High grades were given for:
"program is accurate in content" "provides a clear evaluation of the student's performance"

NEGATIVE Comments

"...too many explanations...too tedious...too boring..."
Below average grades were given for:
"likely to arouse student interest" "relevant practice or testing is consistently provided" "feedback is consistent and provides remediation" "program provides sufficient review without unnecessary redundancy"

TEACHER OVERALL RATING (from 0 to 100): 50

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

None given.

STUDENT Evaluation

One junior spent twenty minutes with this program and stopped before finishing because he or she indicated, "got bored."

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	56
b. I think this program is too hard.	12	7	2
c. The pictures (graphics) were helpful.	96	72	48
d. I got lost in this program and didn't know what to do.	28	12	0
e. I really had to think in order to get the right answer.	69	51	33
f. This program helped me when I made a mistake.	82	65	48
g. I got all the questions right on the first try.	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	35
k. If I could, I would take this program home to use it.	89	69	49
l. I would rather do this program with a classmate than by myself.	64	47	30
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	6
o. I think my friends would enjoy this program.	96	77	58
p. I could not do this program without help from my teacher.	42	28	14
q. This program was too easy for me.	54	35	16
OVERALL STUDENT RATING	92	75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

(31)

TITLE: FACTORY Cost: $ 55

Intended Audience: Grades 3-9 Curriculum: Problem Solving

Instructional Method: Simulation Hardware: Apple, Commodore TRS 80

Producer, Author, or Distributor: Sunburst Communications

Stated Objectives

The Factory takes full advantage of computer technology to offer students (or anybody else, for that matter) a creative simulation exercise in spatial problem-solving. In essence, the program allows students to set up a factory (graphically, of course), complete with machines that punch, stripe and rotate sheets of "material" to create different "products."

TEACHER Evaluation

Two teachers (seventh grade) and one middle school media specialist examined this program. Each spent 60 minutes with the program before completing an evaluation form. The two teachers had prior experience with six programs and the media specialist experience with ten or more.

POSITIVE Comments

"I got fascinated and couldn't quit!"
"...stimulating...a real challenge..."
Exceptionally high grades for all criteria were given to this program.

NEGATIVE Comments

None given.

TEACHER OVERALL RATING (from 0 to 100): 98

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"I have used this program sucessfully with an entire class, small groups, and individuals as part of a lesson on problem solving." All agreed, "This microcomputer program introduces a new content area and additional skills not currently required of my students and I would welcome it as an essential new part of the instructional unit."

STUDENT Evaluation

Twelve seventh, eighth, and ninth graders examined this program for an average of 22 minutes each. Most of the students had prior experience with fewer than four programs. Three students had prior experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	85 / 77	56
b. I think this program is too hard.	12	7	0 / 2
c. The pictures (graphics) were helpful.	96	92 / 72	48
d. I got lost in this program and didn't know what to do.	28	8 / 12	0
e. I really had to think in order to get the right answer.	69	54 / 51	33
f. This program helped me when I made a mistake.	82	69 / 65	48
g. I got all the questions right on the first try.	54	15 / 32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	54 / 64	46
i. I would rather work on this program by myself than with other classmates.	69	62 / 53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	38 / 54	35
k. If I could, I would take this program home to use it.	89	69 / 69	49
l. I would rather do this program with a classmate than by myself.	64	62 / 47	30
m. This program was a waste of my time.	24	15 / 13	2
n. This program is too long.	32	0 / 19	6
o. I think my friends would enjoy this program.	96	78 / 77	58
p. I could not do this program without help from my teacher.	42	31 / 28	14
q. This program was too easy for me.	54	54 / 35	16
OVERALL STUDENT RATING	92	69 / 75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: FRACTION FACTORY Cost: $ 31

Intended Audience: Grades 2-7 Curriculum: Math

Instructional Method: Drill and Game Hardware: Apple

Producer, Author, or Distributor: Troll Micro & Counterpoint Software, Inc.

Stated Objectives

Introduction to the basic elements of fractions. Each problem is presented up to three times with increasing degrees of help in the form of sound, color, and animation.

TEACHER Evaluation

Three elementary school teachers evaluated this program. One teacher was responsible for the fifth grade area and the other two taught third grade. The teachers averaged 32 minutes with the program. All had experienced ten or more programs prior to the evaluation, two had used ten or more programs with their students prior to this evaluation.

POSITIVE Comments

"Program does give correction after mistake and chance to try again."
High grades were given for:
"content of the program is accurate" "learner responses require thought and are a challenge"

NEGATIVE Comments

"Difficult!...difficult to get to the menu for the children since no directions were given on the disc..."
"...no optional skill levels..."
Below average grades were given for:
"program is likely to arouse student interest" "verbal and graphic information is well paced and clear" "relevant practice or testing is consistently provided" "program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100):

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

75

Comments on program utilization

Two of the three indicated they would not use the program in the classroom. One recommended Super Math over this program.

STUDENT Evaluation

Nineteen third, fourth and fifth graders worked with this program for an average of 37 minutes each. Nine of the students had experience with fewer than three programs; five with five programs, one with seven and one with eight.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	89 / 77	56
b. I think this program is too hard.	12	11 / 7	2
c. The pictures (graphics) were helpful.	96	89 / 72	48
d. I got lost in this program and didn't know what to do.	28	11 / 12	0
e. I really had to think in order to get the right answer.	69	53 / 51	33
f. This program helped me when I made a mistake.	82	74 / 65	48
g. I got all the questions right on the first try.	54	16 / 32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	74 / 64	46
i. I would rather work on this program by myself than with other classmates.	69	47 / 53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	21 / 54	35
k. If I could, I would take this program home to use it.	89	89 / 69	49
l. I would rather do this program with a classmate than by myself.	64	47 / 47	30
m. This program was a waste of my time.	24	5 / 13	2
n. This program is too long.	32	16 / 19	6
o. I think my friends would enjoy this program.	96	95 / 77	58
p. I could not do this program without help from my teacher.	42	21 / 28	14
q. This program was too easy for me.	54	11 / 35	16

OVERALL STUDENT RATING

HIGH	AVERAGE	LOW
92	82 / 75	58

(rating given in points 0 to 100)

(35)

TITLE: FRENCH ACHIEVEMENT I Cost: $ 50

Foreign Language

Intended Audience: Grade 8-12 Curriculum: French

Instructional Method: Drill and practice Hardware: Apple

Producer, Author, or Distributor: Douglas Higgins and John McIntyre, Microcomputer Workshops Courseware.

Stated Objectives

From a bank of over 150 problems and a 600-plus word dictionary, this program provides practice in one vocabulary format of the CEEB's French Achievement Examination. After a batch of twenty questions, the student is given an achievement score and a list of the words missed in their dictionary form with English meanings.

TEACHER Evaluation

There were no teacher evaluations completed.

POSITIVE Comments

NEGATIVE Comments

TEACHER OVERALL RATING (from 0 to 100):

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

STUDENT Evaluation

Seven high school students, grades nine to twelve, examined this program for an average of 19 minutes each. Three of the students had prior experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	56 **43**
b. I think this program is too hard.	12 **57**	7	2
c. The pictures (graphics) were helpful.	96	72	48 **0**
d. I got lost in this program and didn't know what to do.	28 **43**	12	0
e. I really had to think in order to get the right answer.	69 **100**	51	33
f. This program helped me when I made a mistake.	82 **100**	65	48
g. I got all the questions right on the first try.	54	32	10 **0**
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	46 **0**
i. I would rather work on this program by myself than with other classmates.	69	53 **57**	36
j. I would like to be graded by my teacher on the work I did with this program.	75	54	33 **29**
k. If I could, I would take this program home to use it.	89	69	49 **14**
l. I would rather do this program with a classmate than by myself.	64	47 **57**	30
m. This program was a waste of my time.	24 **29**	13	2
n. This program is too long.	32	19 **14**	6
o. I think my friends would enjoy this program.	96	77	58 **14**
p. I could not do this program without help from my teacher.	42	28 **29**	14
q. This program was too easy for me.	54	35	16 **0**
OVERALL STUDENT RATING	92	75	58 **56**

(rating given in points 0 to 100)

HIGH AVERAGE LOW

(37)

TITLE: THE FRENCH GAME Cost: $35

Intended Audience: Grades 8-12 Curriculum: French

Instructional Method: Drill and game Hardware: Apple

Producer, Author, or Distributor: J & S Software

Stated Objectives

A high resolution automobile racing game is utilized to help students review and learn French words. Almost 1,000 words on the disk. The teacher can list words, delete words, and delete scores.

TEACHER Evaluation

No teacher evaluations were completed for this program.

POSITIVE Comments

NEGATIVE Comments

TEACHER OVERALL RATING (from 0 to 100):

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

STUDENT Evaluation

Nineteen ninth graders completed evaluation forms for this program. Each student worked with the program for an average of 37 minutes. Nine of the students indicated experience with ten or more programs. These experienced students indicated higher agreement as a group with the following statements than the group with experience in fewer than three programs: "I'd like to do this program again," "I really had to think in order to get the right answer," and "I would like to be graded by my teacher on the work I did with this program."

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	89	77	56
b. I think this program is too hard.	12	7	5 2
c. The pictures (graphics) were helpful.	96	72	21 48
d. I got lost in this program and didn't know what to do.	28	12	5 0
e. I really had to think in order to get the right answer.	89 69	51	33
f. This program helped me when I made a mistake.	78 82	65	48
g. I got all the questions right on the first try.	54	32	5 10
h. Compared to the other times I have studied this subject, this program was fantastic.	68 82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53 55	36
j. I would like to be graded by my teacher on the work I did with this program.	78 73	54	35
k. If I could, I would take this program home to use it.	74 89	69	49
l. I would rather do this program with a classmate than by myself.	63 64	47	30
m. This program was a waste of my time.	24	13	0 2
n. This program is too long.	32	19	5 6
o. I think my friends would enjoy this program.	95 96	77	58
p. I could not do this program without help from my teacher.	42	28	21 14
q. This program was too easy for me.	54	35	5 16
OVERALL STUDENT RATING	88 92	75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: FRENCH TRAVEL VOCABULARY Cost: $60

Intended Audience: Grades 7-12 Curriculum: Foreign Language

Instructional Method: Drill and Game Hardware: Apple, IBM

Producer, Author, or Distributor: Control Data

Stated Objectives

Two kinds of drills are given along with three translation modes: English to French, French to English, or a combination. One drill uses a hangperson format (user is given clues in one language and must guess the letters in a word in the other language). The other drill is a pyramid game.

TEACHER Evaluation

One senior high French teacher examined this program for 90 minutes. The teacher indicated experience with ten or more programs prior to this evaluation.

POSITIVE Comments

High grades were given for:
"likely to arouse student interest"
"content of the program is accurate"
"verbal and graphic information is well paced and clear"
"program provides sufficient review without unnecessary redundancy"
"learner responses require thought and are a challenge"
"documents and printed guides give sufficient support"

NEGATIVE Comments

"...no record of the student's work is kept for the teacher."
Average grades were given for:
"suited for its intended grade level"
"feedback is consistent and provides remediation"
"instructional approach used suits the program's content"
"program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 92

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"To review vocabulary previously learned and expand vocabulary..."
The teacher ranked this program on the same level as French Game.

STUDENT Evaluation

Six sophomores and juniors examined this program for an average of 38 minutes each. Two of the student reported no prior experience with microcomputer programs, and none reported more than six programs experienced prior to this evaluation.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line is larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	56
b. I think this program is too hard.	12	7	2
c. The pictures (graphics) were helpful.	96	72	48
d. I got lost in this program and didn't know what to do.	28	12	0
e. I really had to think in order to get the right answer.	69	51	33
f. This program helped me when I made a mistake.	82	65	48
g. I got all the questions right on the first try.	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	35
k. If I could, I would take this program home to use it.	89	69	49
l. I would rather do this program with a classmate than by myself.	64	47	30
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	6
o. I think my friends would enjoy this program.	96	77	58
p. I could not do this program without help from my teacher.	42	28	14
q. This program was too easy for me.	54	35	16

	HIGH	AVERAGE	LOW
OVERALL STUDENT RATING	92	75	58

(rating given in points 0 to 100)

TITLE: GALAXY SEARCH Cost: $50

Intended Audience: Grades 2-4 Curriculum: Reading and Logic skills

Instructional Method: Educational Game Hardware: Apple

Producer, Author, or Distributor: Learning Well

Stated Objectives

Two to six players practice reading comprehension and critical thinking skills. As they search the galaxy for NASA's missing robot parts, they answer "predicting outcome" questions based on interesting reading selections while avoiding flying meteors. Speeds can be adjusted and a student record is kept.

TEACHER Evaluation

Two third grade teachers examined this program for 25 minutes each. Both teachers had experience with ten or more programgs.

POSITIVE Comments

"...keeps the child's interest..." "...graphics..."
High grades were given for:
"likely to arouse student interest"

NEGATIVE Comments

"...lack of full directions..." "...gives correct answer when child misses; one question about pizza gives incorrect answer..."
Below average to failing grades were given for:
"content of the program is accurate" "verbal and graphic information is well paced and clear" "program provides sufficient review without unnecessary redundancy" "relevant practice or testing is consistently provided" "feedback is consistent and provides remediation"

TEACHER OVERALL RATING (from 0 to 100): 62

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

The teachers indicated possible use for the program in reading classes but only as a supplement to current materials.

STUDENT Evaluation

Twenty-two third graders examined this program for an average of 27 minutes each. Five of the students indicated prior experience with one microcomputer program. Ten students indicated experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	100 / 98	77	56
b. I think this program is too hard.	12	7	0 / 2
c. The pictures (graphics) were helpful.	91 / 96	72	48
d. I got lost in this program and didn't know what to do.	28	14 / 12	0
e. I really had to think in order to get the right answer.	69	50 / 51	33
f. This program helped me when I made a mistake.	82	65	45 / 48
g. I got all the questions right on the first try.	59 / 54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	91 / 82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	32 / 36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	36 / 35
k. If I could, I would take this program home to use it.	86 / 89	69	49
l. I would rather do this program with a classmate than by myself.	64 / 64	47	30
m. This program was a waste of my time.	24	9 / 13	2
n. This program is too long.	32	14 / 19	6
o. I think my friends would enjoy this program.	100 / 96	77	58
p. I could not do this program without help from my teacher.	42	28	11 / 14
q. This program was too easy for me.	54	35	14 / 16
OVERALL STUDENT RATING	92	87 / 75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

(43)

TITLE: GENERAL CHEMISTRY **Cost:** $340

Intended Audience: Grades 8-12 **Curriculum:** Science

Instructional Method: Tutorial **Hardware:** Apple

Producer, Author, or Distributor: COMPress of Van Nostrand Reinhold and Modular Fducational Programs

Stated Objectives

Introduction to general chemistry principles and concepts. Programs include: "Balancing Equations," "Atomic Weights," "Nomenclature," "Percent Composition," "Ideal Gases," and "CHEMAZE."

TEACHER Evaluation

Two junior high school science teachers and one senior high school science teacher examined this program series for an average of 70 minutes each. The senior high school teacher worked with the series for over 200 minutes. All three teachers had experience with ten or more programs.

POSITIVE Comments

"...lettering and diagrams are large and clear...wide variety of exercises..."
"...excellent varied coverage of subject matter...at a 'junior high level'..."
High grades were given for:
"content of the program is accurate" "provides sufficient review without unnecessary redundancy" "learner responses require thought and are a challenge"

NEGATIVE Comments

"...beginning instructions are too complicated for some students..."
Below average grades were given for:
"documents and printed guides give sufficient support"

Senior high school teacher gave "CHEMAZE" an overall rating of "40."

TEACHER OVERALL RATING (from 0 to 100): 96

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"I have used sections of this program as a (learner) station for one table involving 3 to 4 students, and allowing for a rotation from one station to another. I plan to utilize the program again if I can have several computers available at the same time..."
The senior high teacher recommended this program over Programs for Learning Chemistry.

STUDENT Evaluation

One hundred and twelve eighth graders examined this program for 14 minutes each (several invested up to sixty minutes). Over 70 percent of the group had experience with fewer than two program prior to this evaluation. Nine students had experience with ten or more.

When asked to write what had been learned from the program, one student wrote, "It is tons easier to balance equations on a computer."

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	91	77	56
b. I think this program is too hard.	18	7	2
c. The pictures (graphics) were helpful.	73	72	48
d. I got lost in this program and didn't know what to do.	14	12	0
e. I really had to think in order to get the right answer.	68	51	33
f. This program helped me when I made a mistake.	82	65	48
g. I got all the questions right on the first try.	41	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	68	64	46
i. I would rather work on this program by myself than with other classmates.	55	53	36
j. I would like to be graded by my teacher on the work I did with this program.	14	54	35
k. If I could, I would take this program home to use it.	68	69	49
l. I would rather do this program with a classmate than by myself.	50	47	30
m. This program was a waste of my time.	36	13	2
n. This program is too long.	14	19	6
o. I think my friends would enjoy this program.	59	77	58
p. I could not do this program without help from my teacher.	45	28	14
q. This program was too easy for me.	36	35	16
OVERALL STUDENT RATING	78	75	58

(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: GOOD THINKING Cost: $125

Intended Audience: Grades 4-10 Curriculum: Writing and Logic Language Arts

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: Hoffman Ed Systems

Stated Objectives

Programs in logic include: "Sequencing Events," "Outlining," "Judging Appropriateness," "Cause and Effect," and "Details."

TEACHER Evaluation

Three junior high school reading and writing teachers examined this program for an average of 60 minutes each. All three had prior experience with ten or more programs.

POSITIVE Comments

"When an error is made, information is provided to help the student choose correctly for the second try...without actually giving the answer..."
None of the teachers gave the program high grades in any of the areas judged by grading.

NEGATIVE Comments

"...too easy for eighth graders..."
"...not enough material -- should continue with higher levels of difficulty..."
"NO DOCUMENTATION."
Below average and failing grades were given for:
"program meets its own stated objectives" "program is suited for its intended grade level" "likely to arouse student interest" "learner responses require thought and are a challenge" "program provides a clear evaluation of student's performance"

TEACHER OVERALL RATING (from 0 to 100):

64

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...for remedial use only..."

STUDENT Evaluation

Thirty-three fifth, sixth, seventh and eighth graders examined this program for an average of 17 minutes each. Nine of the students had experience with only one program before the evaluation, 14 had experience with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	48 56
b. I think this program is too hard.	12	7	0 2
c. The pictures (graphics) were helpful.	96	72	12 48
d. I got lost in this program and didn't know what to do.	28	12	3 0
e. I really had to think in order to get the right answer.	69	51	18 33
f. This program helped me when I made a mistake.	82	65	55 48
g. I got all the questions right on the first try.	58 54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	18 46
i. I would rather work on this program by myself than with other classmates.	58 69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	15 35
k. If I could, I would take this program home to use it.	89	69	30 49
l. I would rather do this program with a classmate than by myself.	64	47	27 30
m. This program was a waste of my time.	21 24	13	2
n. This program is too long.	21 32	19	6
o. I think my friends would enjoy this program.	96	77	45 58
p. I could not do this program without help from my teacher.	42	28	12 14
q. This program was too easy for me.	76 54	35	16
OVERALL STUDENT RATING	92	75	49 58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

(47)

TITLE: GRAMMAR EXAMINER Cost: $43

Intended Audience: Grades 5-10 Curriculum: Language Arts

Instructional Method: Simulation Hardware: Apple, Commodore, IBM

Producer, Author, or Distributor: DesignWare and Marbaugh

Stated Objectives

Climbing a newspaper hierarchy can be a fun way to learn grammar. You begin as a cub reporter on the Grammar Examiner newspaper, and, if you learn to edit news stories well, you move up in position and salary until you become the Editor in Chief.

TEACHER Evaluation

One middle school media specialist and one ninth grade teacher examined this program for 45 minutes each. The media specialist had prior experience with ten or more programs and the teacher prior experience with two programs.

POSITIVE Comments

"The appeal to students is the major strength...it holds student interest."
Above average grades were given for:
"likely to arouse student interest" "learner responses require thought and are a challenge" "the instructional approach used suits the program's content" "documents and printed guides give sufficient support"

NEGATIVE Comments

"...the beginning demonstration may be too difficult for some students to understand."
"Too many 'chance' spaces so that it's possible to not answer questions for several turns in a row...you can't move backwards to avoid this."
Below average grades were given for:
"provides sufficient review without unnecessary redundancy" "provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 90

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...as a cumulative review tool for grammar, probably independent or small group study."

STUDENT Evaluation

Twenty-four ninth graders examined this program for an average of 38 minutes each. Three invested a full hour. Ten of the students had no prior experience with microcomputer programs; four indicated this to be only their second program; and two indicated prior experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	84 / 77	56
b. I think this program is too hard.	12	0 / 7	2
c. The pictures (graphics) were helpful.	96	88 / 72	48
d. I got lost in this program and didn't know what to do.	28	20 / 12	0
e. I really had to think in order to get the right answer.	69	60 / 51	33
f. This program helped me when I made a mistake.	82	68 / 65	48
g. I got all the questions right on the first try.	54	32	20 / 10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64 / 64	46
i. I would rather work on this program by myself than with other classmates.	69	53	44 / 36
j. I would like to be graded by my teacher on the work I did with this program.	73	56 / 54	35
k. If I could, I would take this program home to use it.	89	68 / 69	49
l. I would rather do this program with a classmate than by myself.	64	48 / 47	30
m. This program was a waste of my time.	24	13	8 / 2
n. This program is too long.	32 / 32	19	6
o. I think my friends would enjoy this program.	96	80 / 77	58
p. I could not do this program without help from my teacher.	42	28 / 28	14
q. This program was too easy for me.	54	35	14 / 16
OVERALL STUDENT RATING (rating given in points 0 to 100)	92	77 / 75	58
	HIGH	AVERAGE	LOW

TITLE: HOME ENERGY SAVINGS Cost: $ 35

Intended Audience: Grades 9-12 Curriculum: Home Economics
Math

Instructional Method: Simulation Hardware: Apple, TRS 80

Producer, Author, or Distributor: HRM Software

Stated Objectives

Object of the simulation is to make sensible investments in energy conservation in the home. Students learn about various insulation methods, storm windows and doors, furnace replacement, thermostat control, and other conservation measures.

TEACHER Evaluation

One eleventh grade chemistry teacher examined this program for 30 minutes. The teacher had prior experience with five microcomputer programs.

POSITIVE Comments

The teacher gave the program exceptionally high grades for all criteria. "A good program for emphasizing the value of spending money to conserve energy..."

NEGATIVE Comments

None given.

TEACHER OVERALL RATING (from 0 to 100): 80

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"Could be used in physics class to help in the study of heat and heat loss. Also useful in home economics."

STUDENT Evaluation

One eleventh grade student examined this program for 25 minutes. The student had no prior experience with microcomputer programs.

An "X" is placed on the line following each statement with which the student agreed.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	X 77	56
b. I think this program is too hard.	12	7	2
c. The pictures (graphics) were helpful.	96	X 72	48
d. I got lost in this program and didn't know what to do.	28	12	0
e. I really had to think in order to get the right answer.	69	51	33
f. This program helped me when I made a mistake.	82	65	48
g. I got all the questions right on the first try.	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	X 64	46
i. I would rather work on this program by myself than with other classmates.	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	X 54	35
k. If I could, I would take this program home to use it.	89	69	49
l. I would rather do this program with a classmate than by myself.	64	X 47	30
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	6
o. I think my friends would enjoy this program.	96	X 77	58
p. I could not do this program without help from my teacher.	42	X 28	14
q. This program was too easy for me.	54	35	16
OVERALL STUDENT RATING	92	99 75	58

(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: HELLO APPLE Cost: $

Intended Audience: Grades 6-12 Curriculum: Computer skills

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: AV Systems Inc.

Stated Objectives

A full menu leading to 52 different programs which allow the student to become acquainted with a variety of microcomputer functions. Programs include: "Business Programming," "The Time Machine," "Personal Programming," "Calorie/Weight Program," "Star Wars," "Animation in 3D," and "Marooned In Space."

TEACHER Evaluation

Two seventh grade teachers spent 60 minutes each examining various programs offered. Both had prior experience with ten or more programs.

POSITIVE Comments

None given.

NEGATIVE Comments

"...very amaturistic programming...some syntax errors still exist in program..."
"Some programs are limited for only certain groups of people; most programs will not interest junior high kids."

Below average grades were given for:
"relevant practice or testing is consistently provided"
"learner responses require thought and are a challenge"
"program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 40

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

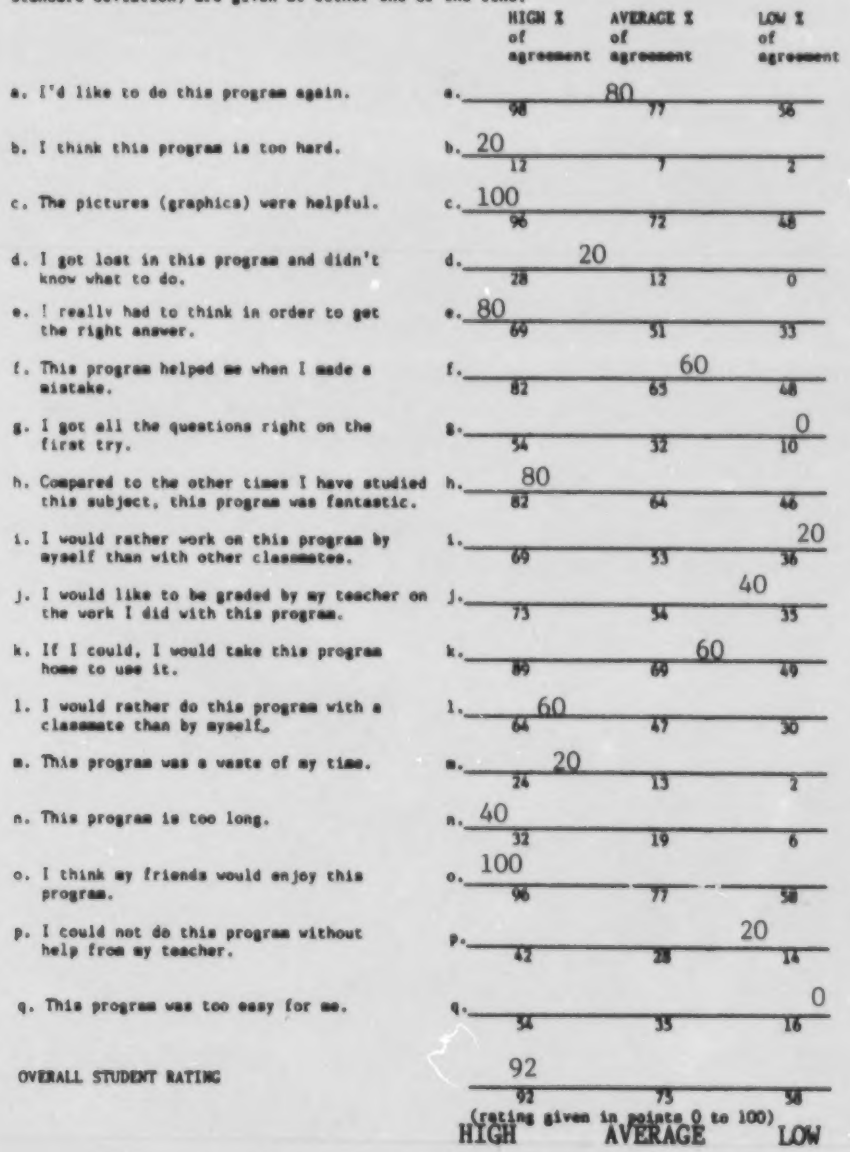
Comments on program utilization

None.

STUDENT Evaluation

Five seventh graders examined various programs for an average of 20 minutes. The five students represented a variety of experience levels; one indicated prior experience with only one other program; one student indicated prior experience with ten or more; others were scattered between these two extremes.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.


HIGH % of agreement
AVERAGE % of agreement
LOW % of agreement
a. I'd like to do this program again.
a. 80 98 77 56
b. I think this program is too hard.
b. 20 12 7 2
c. The pictures (graphics) were helpful.
c. 100 96 72 48
d. I got lost in this program and didn't know what to do.
d. 20 28 12 0
e. I really had to think in order to get the right answer.
e. 80 69 51 33
f. This program helped me when I made a mistake.
f. 60 82 65 48
g. I got all the questions right on the first try.
g. 0 54 32 10
h. Compared to the other times I have studied this subject, this program was fantastic.
h. 80 82 64 46
i. I would rather work on this program by myself than with other classmates.
i. 20 69 53 36
j. I would like to be graded by my teacher on the work I did with this program.
j. 40 73 54 35
k. If I could, I would take this program home to use it.
k. 60 89 69 49
l. I would rather do this program with a classmate than by myself.
l. 60 64 47 30
m. This program was a waste of my time.
m. 20 24 13 2
n. This program is too long.
n. 40 32 19 6
o. I think my friends would enjoy this program.
o. 100 96 77 58
p. I could not do this program without help from my teacher.
p. 20 42 28 14
q. This program was too easy for me.
q. 0 54 35 16
OVERALL STUDENT RATING
92 92 75 58
(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: HIGH SCHOOL MATH COMPETENCY SERIES Cost: $ 99

Intended Audience: Grades 9-12 Curriculum: Math

Instructional Method: Drill Hardware: TRS 80

Producer, Author, or Distributor: Microcomputer Workshops Corp.

Stated Objectives

Basic skills drill and remediation in 14 subprograms including: whole numbers, fractions, decimals, percentages, primes, probability, ratio & proportion, word problems and money problems.

TEACHER Evaluation

One high school math teacher examined this program for sixty minutes. The teacher had prior experience with ten or more programs and had utilized at least five microcomputer programs with his class prior to this evaluation.

POSITIVE Comments

"...grades the student at the end, and gives positive feedback..."

NEGATIVE Comments

Below average grades were given for:
"suited for its intended grade level" "likely to arouse student interest"
"verbal and graphic information is well paced and clear"
The teacher graded the program at the "F" level for:
"provides sufficient review without unnecessary redundancy" and
"documents and printed guides give sufficient support"

TEACHER OVERALL RATING (from 0 to 100): 80

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...would use as a remedial program in math, industrial arts, home economics, and science..."

STUDENT Evaluation

Fourteen high school students, grades nine to eleven, examined this program. The students averaged 57 minutes each with the program, some working with it for up to 90 minutes before completing an evaluation form. The group had a varied record of prior microcomputer experience as one reported "none," three reported one program, and only two reported experience with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	93		
	98	77	56
b. I think this program is too hard.		7	
	12	7	2
c. The pictures (graphics) were helpful.			50
	96	72	48
d. I got lost in this program and didn't know what to do.		14	
	28	12	0
e. I really had to think in order to get the right answer.	71		
	89	51	33
f. This program helped me when I made a mistake.		71	
	82	65	48
g. I got all the questions right on the first try.	57		
	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.		64	
	82	64	46
i. I would rather work on this program by myself than with other classmates.		64	
	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	86		
	73	54	35
k. If I could, I would take this program home to use it.		71	
	89	69	49
l. I would rather do this program with a classmate than by myself.			29
	64	47	30
m. This program was a waste of my time.			0
	24	13	2
n. This program is too long.		14	
	32	19	6
o. I think my friends would enjoy this program.		71	
	96	77	58
p. I could not do this program without help from my teacher.	36		
	42	28	14
q. This program was too easy for me.	43		
	54	35	16
OVERALL STUDENT RATING		68	
	92	75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: KEY SIGNATURES Cost: $ 36

Intended Audience: Grades 5-12 Curriculum: Music

Instructional Method: Practice Hardware: Apple

Producer, Author, or Distributor: MECC

Stated Objectives

Gives the student drill in recognizing major and minor key signatures. Students may choose to work with major keys only, minor keys, or with a mixture of major and minor key signatures.

TEACHER Evaluation

One elementary school music teacher evaluated this program. The teacher had experienced ten or more programs prior to the evaluation. The teacher examined the program for three minutes.

POSITIVE Comments

"The child can do the program at his own pace...and can escape in the middle of the program."
High grades were given for:
"program meets its own stated objectives" "verbal and graphic information is well paced and clear"

NEGATIVE Comments

"...the correct answer is given after just one try...BORING...flash cards create the same result..."
Exceptionally low grades were given for:
"likely to arouse student interest" "provides sufficient review without unnecessary redundancy" "learner responses require thought and are a challenge" "feedback is consistent and provides remediation" "program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 25

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

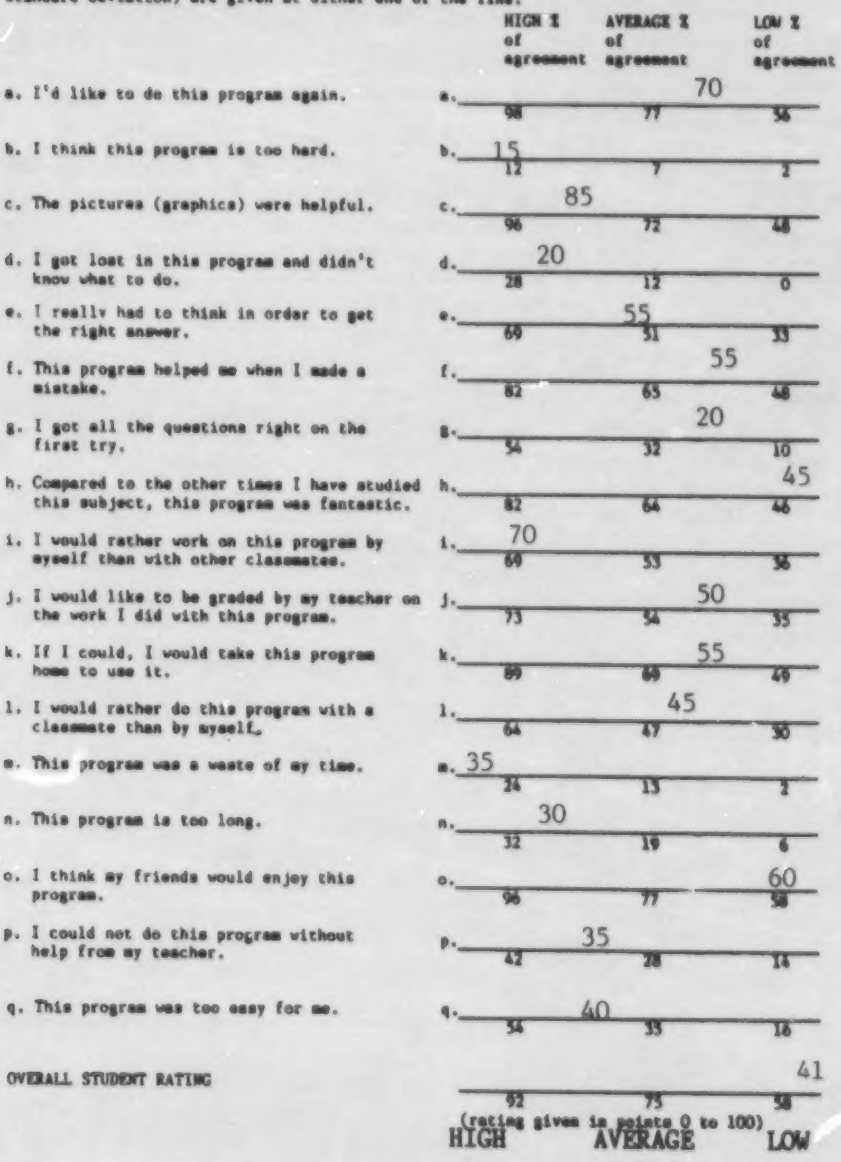
Comments on program utilization

Would not use.

STUDENT Evaluation

Twenty fifth and sixth graders examined this program for an average of eight minutes each. A majority of the student had experienced fewer than two programs prior to this evaluation. Two students indicated experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.


HIGH % of agreement
AVERAGE % of agreement
LOW % of agreement
a. I'd like to do this program again.
98 77 56 70
b. I think this program is too hard.
12 7 2 15
c. The pictures (graphics) were helpful.
96 72 48 85
d. I got lost in this program and didn't know what to do.
28 12 0 20
e. I really had to think in order to get the right answer.
69 51 33 55
f. This program helped me when I made a mistake.
82 65 48 55
g. I got all the questions right on the first try.
54 32 10 20
h. Compared to the other times I have studied this subject, this program was fantastic.
82 64 46 45
i. I would rather work on this program by myself than with other classmates.
69 53 36 70
j. I would like to be graded by my teacher on the work I did with this program.
73 54 35 50
k. If I could, I would take this program home to use it.
89 68 46 55
l. I would rather do this program with a classmate than by myself.
64 47 30 45
m. This program was a waste of my time.
24 13 2 35
n. This program is too long.
32 19 6 30
o. I think my friends would enjoy this program.
96 77 58 60
p. I could not do this program without help from my teacher.
42 28 14 35
q. This program was too easy for me.
54 35 16 40
OVERALL STUDENT RATING
92 75 58 41
(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: KIDWRITER Cost: $ 35

Intended Audience: Grades 1-5 Curriculum: Writing

Instructional Method: Word Processing Hardware: Apple, Commodore, IBM, Atari

Producer, Author, or Distributor: Spinnaker and Marbaugh

Stated Objectives

Children choose from a variety of fascinating objects to make a picture on the screen. They then type in a story about the picture, thus creating the illustrated story. Can then add pages to their story. Provides format for story writing and illustration. Introduces the fundamentals of word processing.

TEACHER Evaluation

One fourth grade teacher examined this program for twenty minutes. The teacher indicated experience with ten or more programs in the classroom.

POSITIVE Comments

"...program is useful at many levels..."
Exceptionally high grades were given by the teacher in all criteria.

NEGATIVE Comments

None given.

TEACHER OVERALL RATING (from 0 to 100): 90

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"I will use this for creative writing. Stories can be saved for others to read. A story may also be started with each student adding to it."

STUDENT Evaluation

Eight fourth graders examined this program for an average of 18 minutes each. Experience with microcomputer programs varied among the students as one indicated no prior experience, two with one program, one with two, one with five, one with nine, and one with ten.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	100 / 98	77	56
b. I think this program is too hard.	12	7	0 / 2
c. The pictures (graphics) were helpful.	100 / 96	72	48
d. I got lost in this program and didn't know what to do.	28	13 / 12	0
e. I really had to think in order to get the right answer.	69	51	0 / 33
f. This program helped me when I made a mistake.	82	63 / 65	48
g. I got all the questions right on the first try.	63 / 54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	75 / 82	64	46
i. I would rather work on this program by myself than with other classmates.	69	50 / 53	36
j. I would like to be graded by my teacher on the work I did with this program.	88 / 75	54	35
k. If I could, I would take this program home to use it.	88 / 89	69	49
l. I would rather do this program with a classmate than by myself.	64	50 / 47	30
m. This program was a waste of my time.	24	13 / 13	2
n. This program is too long.	32	13 / 19	6
o. I think my friends would enjoy this program.	96	77	63 / 58
p. I could not do this program without help from my teacher.	42	25 / 28	14
q. This program was too easy for me.	54	38 / 35	16

OVERALL STUDENT RATING

HIGH	AVERAGE	LOW
98 / 92	75	58

(rating given in points 0 to 100)

(59)

TITLE: LE DEMENAGEMENT Cost: $81

Intended Audience: Grades 7-12 Curriculum: Foreign Language, French

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: D. C. Heath

Stated Objectives

To learn French terms for family members
To become familiar with the French terms for the rooms and furnishings of a house
To practice using the present tense of the verb METTRE
To practice using French prepositions

TEACHER Evaluation

One high school French teacher examined this program for sixty minutes. The teacher indicated prior experience with five microcomputer programs.

POSITIVE Comments

The teacher gave the program high and exceptionally high grades in every area evaluated.
Of special note, "very strong graphics."

NEGATIVE Comments

"...could not change exercises..."

TEACHER OVERALL RATING (from 0 to 100): 96

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

The teacher agreed, "This microcomputer program supports and enhances my current materials and would provide basic support to the instruction of the skills I require of my students."

STUDENT Evaluation

Twenty-five tenth graders examined the program for an average of 39 minutes each. Ten of the students had experienced fewer than three programs prior to the evaluation. Ten of the students indicated experience with ten or more programs. The group with more experience had a much higher agreement percentage with such statements as "I'd like to do this program again," "I would like to be graded by my teacher on the work I did with this program," and "If I could, I would take this program home to use it." The group with more experience also rated the program exceptionally high (91) while the less experienced group gave the program a rather average rating (74). All agreed that the graphics were excellent and helpful.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	96	77	72 56
b. I think this program is too hard.	12	7	12 2
c. The pictures (graphics) were helpful.	96	72	96 48
d. I got lost in this program and didn't know what to do.	28	12	8 0
e. I really had to think in order to get the right answer.	69	51	80 33
f. This program helped me when I made a mistake.	82	65	72 48
g. I got all the questions right on the first try.	54	32	4 10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	80 46
i. I would rather work on this program by myself than with other classmates.	69	33	52 36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	56 35
k. If I could, I would take this program home to use it.	89	60	52 40
l. I would rather do this program with a classmate than by myself.	64	47	40 30
m. This program was a waste of my time.	24	13	12 2
n. This program is too long.	32	19	16 6
o. I think my friends would enjoy this program.	96	77	76 52
p. I could not do this program without help from my teacher.	42	25	12 14
q. This program was too easy for me.	54	35	16 16

OVERALL STUDENT RATING

HIGH	AVERAGE	LOW
92	75	83 58

(rating given in points 0 to 100)

TITLE: LE VOCABULAIRE FRANCAIS Cost: $80

Intended Audience: Grades 7-12 Curriculum: Foreign Language, French

Instructional Method: Rote drill Hardware: Commodore, Apple

Producer, Author, or Distributor: Island Software

Stated Objectives

Includes a large assortment of nouns, verbs, and miscellaneous words; also all French diacritical marks. Students have the choice of French-English or English-French drill.

TEACHER Evaluation

One senior high school French teacher examined this program for 30 minutes. The teacher indicated experience with six other microcomputer programs prior to this evaluation.

POSITIVE Comments

"...a teacher can program own words in addition to those offered in this program..."

NEGATIVE Comments

Average to below average grades were given for the following: "likely to arouse student interest" "content of the program is accurate" "verbal and graphic information is well paced and clear" "provides sufficient review without unnecessary redundancy" "documents and printed guides give sufficient support" "provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 70

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...does not accept synonyms..." The teacher also commented that he or she had worked with French Game prior to this evaluation and would recommend French Game over Le Vocabulaire Francais because French Game will motivate students much more.

STUDENT Evaluation

Five ninth and tenth grade students examined this program for an average of 27 minutes each. The group varied in their previous microcomputer experience as one reported no experience, two reported experience with four programs, two with five and one with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	40
b. I think this program is too hard.	12	7	40
c. The pictures (graphics) were helpful.	96	72	20
d. I got lost in this program and didn't know what to do.	28	12	20
e. I really had to think in order to get the right answer.	69	51	40
f. This program helped me when I made a mistake.	82	65	60
g. I got all the questions right on the first try.	54	33	20
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	20
i. I would rather work on this program by myself than with other classmates.	89	53	80
j. I would like to be graded by my teacher on the work I did with this program.	73	54	0
k. If I could, I would take this program home to use it.	80	69	60
l. I would rather do this program with a classmate than by myself.	84	47	40
m. This program was a waste of my time.	24	13	40
n. This program is too long.	32	19	20
o. I think my friends would enjoy this program.	96	77	40
p. I could not do this program without help from my teacher.	42	28	40
q. This program was too easy for me.	54	35	20

OVERALL STUDENT RATING	HIGH	AVERAGE	LOW
(rating given in points 0 to 100)	92	75	53

(63)

TITLE: LIBRARY I.Q. Cost: $40

Intended Audience: Grades 7-12 Curriculum: Library Skills

Instructional Method: Tutorial Hardware: TRS 80

Producer, Author, or Distributor: Micro Learninghouse

Stated Objectives

Library IQ is a series of five microcomputer programs designed for teaching library skills. Programs include: "Audio-Visual Skills: proper care and handling of av equipment and materials," "Card Catalog/ Dewey Decimal System," "Library Skills: arrangement of materials in fiction, interlibrary loan, and use of the Readers' Guide and general encyclopedia - reference materials."

TEACHER Evaluation

One senior high school media specialist examined this program for 45 minutes. The media specialist had experience with ten or more programs prior to the evaluation.

POSITIVE Comments

"...well organized..."
No high grades were given.

NEGATIVE Comments

Low grades were given for:
"likely to arouse student interest"
"verbal and graphic information is well paced and clear"
"relevant practice or testing is consistently provided"
"learner responses require thought and are a challenge"
"program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 80

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...could be used to train a library aide..."
"...have also examined Library Aide, neither are suitable for senior high school...too elementary..."

STUDENT Evaluation

Three senior high students examined this program for 28 minutes each. One student had prior experience with one program; one student with two; one student with seven.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line is larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	67 56
b. I think this program is too hard.	12	7	0 2
c. The pictures (graphics) were helpful.	96	72	33 48
d. I got lost in this program and didn't know what to do.	33 28	12	0
e. I really had to think in order to get the right answer.	69	51	33 33
f. This program helped me when I made a mistake.	100 82	65	48
g. I got all the questions right on the first try.	54	32	0 10
h. Compared to the other times I have studied this subject, this program was fantastic.	100 82	64	46
i. I would rather work on this program by myself than with other classmates.	67 69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	67 73	54	35
k. If I could, I would take this program home to use it.	67 89	69	49
l. I would rather do this program with a classmate than by myself.	33 64	47	30
m. This program was a waste of my time.	0 34	13	2
n. This program is too long.	0 32	19	6
o. I think my friends would enjoy this program.	96	77	67 58
p. I could not do this program without help from my teacher.	33 42	28	14
q. This program was too easy for me.	33 54	35	16

OVERALL STUDENT RATING

86 (rating given in points 0 to 100)

92 75 58

HIGH AVERAGE LOW

(65)

TITLE: LINCOLN'S DECISIONS Cost: $ 59

Intended Audience: Grades 7-12 Curriculum: History

Instructional Method: Simulation Hardware: Apple, TRS 80, Commodore

Producer, Author, or Distributor: Educational Activities

Stated Objectives

This program leads students through key events in President Lincoln's life and administration. At each major turning point, students are presented with the choices he faced and are challenged to duplicate his decisions.

TEACHER Evaluation

One eighth grade teacher and one middle school media specialist examined this program for an average of 35 minutes each. The teacher had prior experience with four microcomputer programs and the media specialist had prior experience with ten or more programs.

POSITIVE Comments

The teacher commented, "...challenging; teaches additional information (about Lincoln) and requires critical thinking and discovery questions..."
High grades were given for:
"content of the program is accurate" "verbal and graphic information is well paced and clear"

NEGATIVE Comments

The media specialist felt the program did not move rapidly from one section to the next, and it was difficult for students to work rapidly through the program.
Below average grades were given for:
"program is likely to arouse student interest" "program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 81

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"Would support our mini-course on United States Presidents."
"Would work well in a situation where students are required to compete in teams."

STUDENT Evaluation

Four eighth graders examined this program for 38 minutes each, on the average. Two of the student had prior experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	a. 100	98	77	56
b. I think this program is too hard.	b. 25	12	7	2
c. The pictures (graphics) were helpful.	c. 75	96	72	48
d. I got lost in this program and didn't know what to do.	d. 0	28	12	0
e. I really had to think in order to get the right answer.	e. 75	69	51	33
f. This program helped me when I made a mistake.	f. 100	82	65	48
g. I got all the questions right on the first try.	g. 0	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	h. 100	82	64	46
i. I would rather work on this program by myself than with other classmates.	i. 25	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	j.	73	5[illegible]	33
k. If I could, I would take this program home to use it.	k. 100	89	69	49
l. I would rather do this program with a classmate than by myself.	l. 75	64	47	30
m. This program was a waste of my time.	m. 0	24	19	2
n. This program is too long.	n. 25	32	19	6
o. I think my friends would enjoy this program.	o. 100	86	77	58
p. I could not do this program without help from my teacher.	p. 0	42	28	14
q. This program was too easy for me.	q. 0	56	35	15
OVERALL STUDENT RATING	91	92	75	58

(rating given in points 0 to 100)
HIGH AVERAGE LOW

(67)

TITLE: LOLLIPOP DRAGON: CURSOR CONTROL Cost: $ 320

Intended Audience: Grades 1-5 Curriculum: Computer Skills

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: SVE

Stated Objectives

A general introduction to the operations of the microcomputer. Four programs are designed for the Apple II. Each program also has a filmstrip to introduce the content and concepts for the following areas: "Function Key Adventure," "Cursor Control," "Plotting," and "Letter & Number Key."

TEACHER Evaluation

Two third grade teachers examined this program for an average of 25 minutes each. Both had experience with ten or more programs.

POSITIVE Comments

"...gives them plenty of practice..."
The program was given exceptionally high grades in all areas.

NEGATIVE Comments

None given.

TEACHER OVERALL RATING (from 0 to 100): 100

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...excellent introduction to the computer and its functions..."

STUDENT Evaluation

Sixteen third graders examined this program for an average of 16 minutes each. All had experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	100 (98)	(77)	(56)
b. I think this program is too hard.	(12)	(7)	0 (2)
c. The pictures (graphics) were helpful.	94 (96)	(72)	(48)
d. I got lost in this program and didn't know what to do.	31 (28)	(12)	(0)
e. I really had to think in order to get the right answer.	(69)	50 (51)	(33)
f. This program helped me when I made a mistake.	94 (81)	(63)	(48)
g. I got all the questions right on the first try.	100 (54)	(32)	(10)
h. Compared to the other times I have studied this subject, this program was fantastic.	94 (81)	(64)	(46)
i. I would rather work on this program by myself than with other classmates.	(69)	44 (53)	(36)
j. I would like to be graded by my teacher on the work I did with this program.	94 (73)	(54)	(35)
k. If I could, I would take this program home to use it.	81 (89)	(69)	(49)
l. I would rather do this program with a classmate than by myself.	56 (64)	(47)	(30)
m. This program was a waste of my time.	(24)	(13)	6 (2)
n. This program is too long.	(32)	13 (19)	(6)
o. I think my friends would enjoy this program.	94 (96)	(77)	(58)
p. I could not do this program without help from my teacher.	38 (43)	(28)	(14)
q. This program was too easy for me.	(54)	38 (35)	(16)
OVERALL STUDENT RATING	97 (92)	(75)	(58)

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: LOLLIPOP DRAGON: FUNCTION KEY ADVENTURES **Cost:** $ 320

Intended Audience: Grades 1-5 **Curriculum:** Computer Skills

Instructional Method: Tutorial **Hardware:** Apple

Producer, Author, or Distributor: SVE

Stated Objectives

Four programs are included to introduce the student to the computer: "Letter and Number Key Adventures," "Function Key Adventure," "Cursor Control Adventures," and "Plotting and Programming Adventures." Special filmstrips for introducing lessons are also available.

TEACHER Evaluation

One third grade teacher examined this program for twenty minutes. The teacher had experience with ten or more programs.

POSITIVE Comments

"The graphics are great...includes pre and post follow-up activities..." High grades were given by the teacher for: "likely to arouse student interest" "learner responses require thought and are a challenge" "provides a clear evaluation of the student's performance"

NEGATIVE Comments

None given.

TEACHER OVERALL RATING (from 0 to 100): 95

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"This program would provide an excellent source for a computer literacy unit. I would use all four disks for independent study. This program would fit well with our existing program and routine in the classroom. I am really impressed."

STUDENT Evaluation

Nineteen third graders examined this program for 38 minutes each. All students indicated experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	95 (98)	(77)	(56)
b. I think this program is too hard.	11 (12)	(7)	(2)
c. The pictures (graphics) were helpful.	89 (96)	(72)	(48)
d. I got lost in this program and didn't know what to do.	74 (28)	(12)	(0)
e. I really had to think in order to get the right answer.	63 (69)	(51)	(33)
f. This program helped me when I made a mistake.	79 (82)	(63)	(48)
g. I got all the questions right on the first try.	58 (54)	(32)	(10)
h. Compared to the other times I have studied this subject, this program was fantastic.	79 (82)	(64)	(46)
i. I would rather work on this program by myself than with other classmates.	74 (69)	(53)	(36)
j. I would like to be graded by my teacher on the work I did with this program.	84 (73)	(54)	(35)
k. If I could, I would take this program home to use it.	68 (86)	(49)	(49)
l. I would rather do this program with a classmate than by myself.	42 (64)	(47)	(30)
m. This program was a waste of my time.	11 (24)	(13)	(2)
n. This program is too long.	21 (32)	(19)	(6)
o. I think my friends would enjoy this program.	89 (96)	(77)	(58)
p. I could not do this program without help from my teacher.	74 (42)	(28)	(14)
q. This program was too easy for me.	42 (54)	(35)	(16)

OVERALL STUDENT RATING

88 (92) (75) (58)

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: MAIN IDEA Cost: $80

Intended Audience: Grades 4-9 Curriculum: Language Arts, Reading

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: Films for the Humanities and BEDE Software

Stated Objectives

The Main Idea is an exciting adventure in reading comprehension. Students analyze short pieces of text to find and report on the main idea of each passage. The player is challenged to assist an endangered alien culture in deciphering the main idea of a number of important documents.

TEACHER Evaluation

One fourth grade and one fifth grade teacher examined this program for an average of 18 minutes each. Both teachers had experience with ten or more programs.

POSITIVE Comments

"Students are very motivated by the game format."
Above average grades were given for:
"program provides a clear evaluation of the student's performance"

NEGATIVE Comments

"The paragraphs are not very well written." "I really didn't like the way the game board was displayed...nor the way a player's turn was interupped by a graphic display of the cities passed."
Average to below average grades were given for:
"content of the program is accurate" "verbal and graphic information is well paced and clear" "program provides sufficient review without unnecessary redundancy" "documents and printed guides given sufficient support"

TEACHER OVERALL RATING (from 0 to 100): 63

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

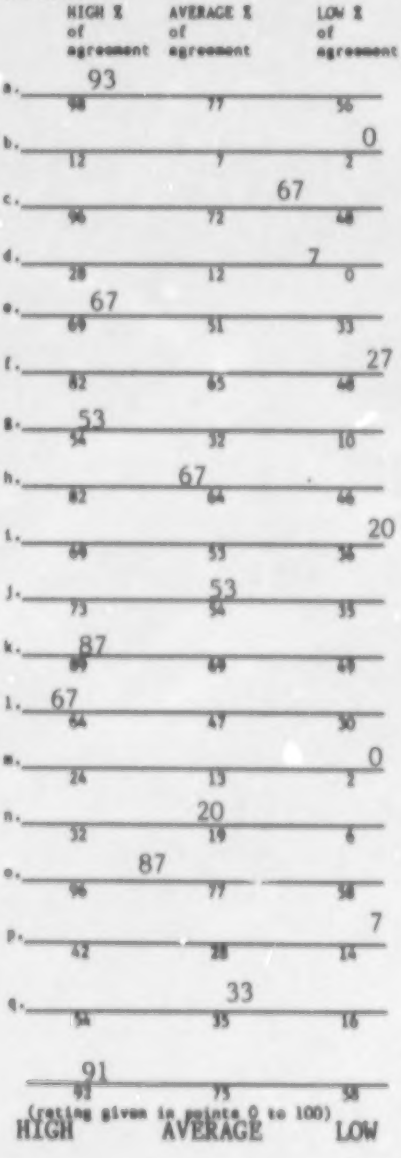
"...during free time only..." "...as a reward..."

STUDENT Evaluation

Fifteen fourth and fifth graders examined this program for an average of 23 minutes.

Three of the students had no prior experience with microcomputer programs, and two had experience with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.



TITLE: MAP READING Cost: $20

Intended Audience: Grades 4-9 Curriculum: Geography, Math

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: Micro Power & Light Co., & Marbaugh

Stated Objectives

Introduces the student to "the compass," "the concept of scale," and "notation (direction and distance written together)."

TEACHER Evaluation

One media specialist examined this program for 40 minutes. The media specialist had prior experience with ten or more programs.

POSITIVE Comments

"...program provides practice on one concept and does not clutter with irrelevant information..."
High grades were given for:
"verbal and graphic information is well paced and clear" "feedback is consistent and provides remediation"

NEGATIVE Comments

"I do not like the graphic representation of a map. I would have liked more embellishment and maybe different settings."
Below average grades were given for:
"meets its own statedobjectives" "documents and printed guides give sufficient support" "provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 75

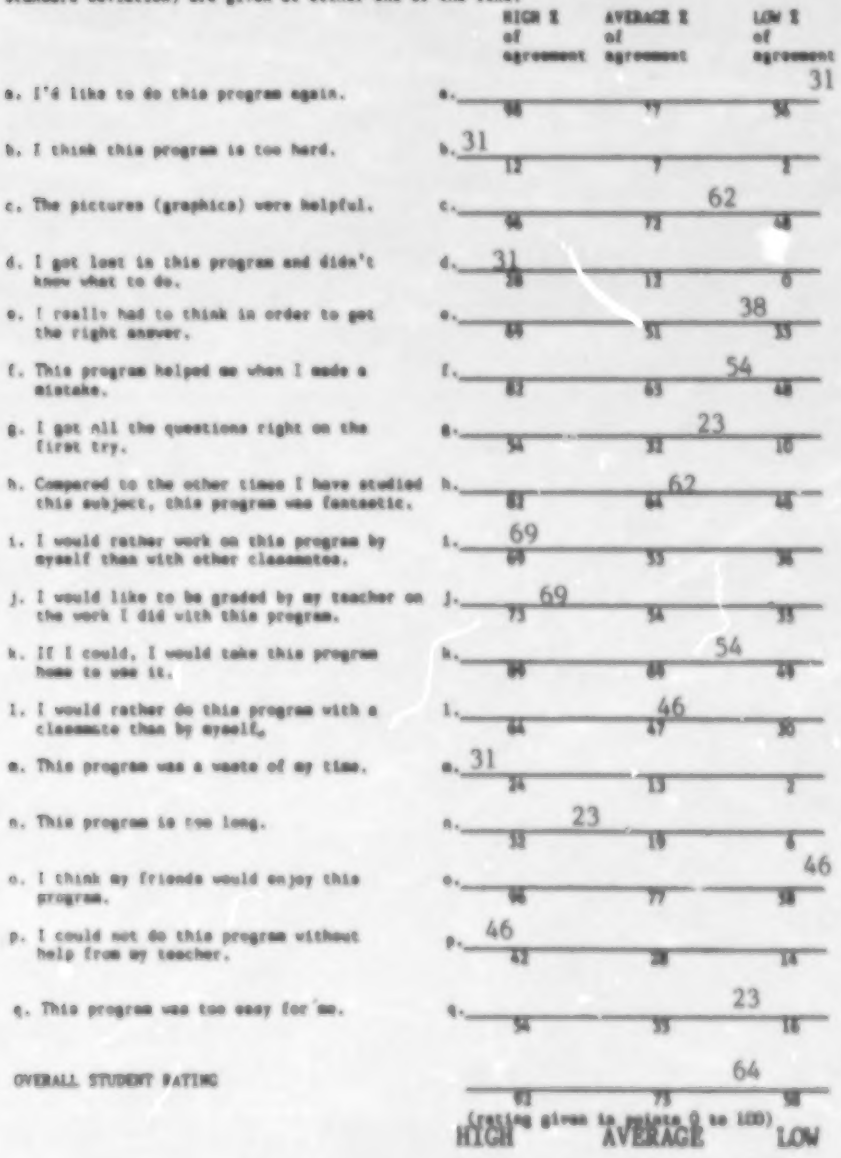
94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

STUDENT Evaluation

Thirteen fourth, fifth, and sixth graders spent an average of 14 minutes with this program. Five of the students had prior experience with seven or more microcomputer programs.
Three of the students indicated that they stopped the program because they "got bored."

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line is larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.



TITLE: MATH MAZE Cost: $45

Intended Audience: Grades 2-6 Curriculum: Math

Instructional Method: Skill Practice & Game Hardware: Apple, IBM, Atari

Producer, Author, or Distributor: DCH Software, D.C. Heath

Stated Objectives

An educational computer game that reinforces student skills in addition, subtraction, multiplication and division. Students maneuver a fly through a maze in search of the correct answer. Students can design and store their own maze.

TEACHER Evaluation

Two junior high school math teachers and one junior high school media specialist examined this program for 45 minutes each. One teacher indicated experience with three programs and one teacher and the media specialist indicated prior experience with ten or more programs.

POSITIVE Comments

"The directions are short and clear." "It is a good motivating drill for students learning the basic facts." "...the ability to change mazes..." High grades were given for:
"content of the program is accurate" "verbal and graphic information is well paced and clear"

NEGATIVE Comments

"...students are tempted to waste a great deal of time at a level where they are quite efficient..." "...lacks student record keeping..." Average to below average grades were given for:
"likely to arouse student interest" "relevant testing is consistently provided" "program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 85

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

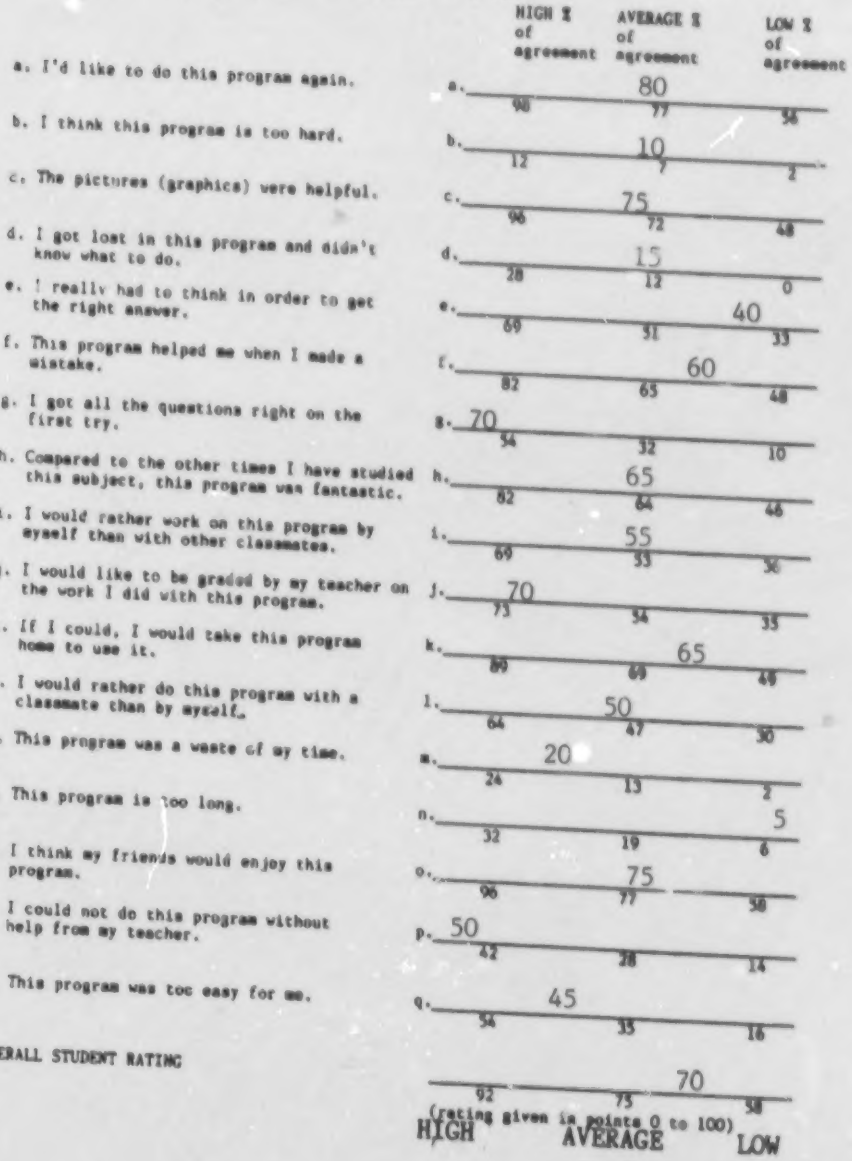
Comments on program utilization

One seventh grade (special education) teacher wrote, "I would use this with my remedial class, especially at the beginning of the year when we are 'refreshing' their basic skills."

STUDENT Evaluation

Twenty students in junior high school special education examined this program for an average of 23 minutes each. Four students indicated experience with no microcomputer programs prior to this evaluation; four with one, three with two, and four with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.



TITLE: MEET THE PRESIDENTS Cost: $ 42

Intended Audience: Grades 6-12 Curriculum: Social Studies

Instructional Method: Game Hardware: Apple

Producer, Author, or Distributor: Social Studies School Service

Stated Objectives

As the portrait of one of the forty U.S. Presidents unfolds, clues are presented at the bottom of the screen. The player may begin typing the president's name at any time (liberal mistakes in spelling are tolerated). New clues can be added or ones programmed may be modified to change grade level.

TEACHER Evaluation

Five teachers examined this program. Three teach junior U.S. History, and two teach seventh grade U.S. History. One teacher had prior experience with no programs; one with one, two with five and one with ten or more. The teachers averaged 26 minutes with the program.

POSITIVE Comments

"...teacher can program his own questions..." "...can be very challenging and entertaining..."
High grades were given for:
"content of the program is accurate"
"verbal and graphic information is well paced and clear"
"relevant practice or testing is consistently provided"

NEGATIVE Comments

"...can become too trivial; slower students tend to become frustrated..."
Low grades were given for:
"documents and printed guides give sufficient support"
"likely to arouse student interest"

TEACHER OVERALL RATING (from 0 to 100): 72

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

Teachers gave the usual suggestions, "independent study, remedial, good drill..." None of the teachers mentioned the possibility of students composing their own clues and setting up their own tests to be taken by their peers. This opportunity for student design of questions is one of the stronger teaching options.

STUDENT Evaluation

Fifteen high school seniors examined this program for an average of 13 minutes each. Two of the students had no prior experience with microcomputer programs, and two had experience with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	**80** 77	56
b. I think this program is too hard.	12	**7** 7	2
c. The pictures (graphics) were helpful.	96	**100** 72	48
d. I got lost in this program and didn't know what to do.	28	**20** 12	0
e. I really had to think in order to get the right answer.	69	**80** 51	33
f. This program helped me when I made a mistake.	82	65	**47** 48
g. I got all the questions right on the first try.	54	32	**13** 10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	**53** 64	46
i. I would rather work on this program by myself than with other classmates.	69	**40** 53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	**47** 54	35
k. If I could, I would take this program home to use it.	89	**60** 69	49
l. I would rather do this program with a classmate than by myself.	64	**60** 47	30
m. This program was a waste of my time.	24	**20** 13	2
n. This program is too long.	32	**20** 19	6
o. I think my friends would enjoy this program.	96	**80** 77	58
p. I could not do this program without help from my teacher.	42	**27** 28	14
q. This program was too easy for me.	54	**27** 35	16
OVERALL STUDENT RATING	92	**79** 75	58

(ratings given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: MICROCOMPUTER APPLICATIONS: DATA PROCESSING Cost: $ 99

Intended Audience: Grades 7-12 Curriculum: Business

Instructional Method: Projects and Drill Hardware: TRS 80, Apple

Producer, Author, or Distributor: Eugene Muscat, Paul Lorton, Beryl Robichaud, Eugene Muscat, Alix-Marie Hall.

Stated Objectives

Projects include On-line Credit Check, Electronic Mail, Updating Accounts, and Retrieving Personnel Information. It provides the student with an activity-based introduction to the basics and applications of data processing to prepare for entry-level jobs.

TEACHER Evaluation

One senior high school business teacher examined this program for 30 minutes. The teacher has prior experience with five microcomputer programs, and had used only one with his or her class prior to the evaluation.

POSITIVE Comments

"...a wide variety of activities..."

NEGATIVE Comments

Exceptionally low grades given in all areas, including "F" in: "verbal and graphic information is well paced and clear" "program provides sufficient review without unnecessary redundancy" "learner responses require thought and are a challenge" "documents and printed guides give sufficient support" "program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 50

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

Teacher indicated preference for the program "Data Entry Activities," because it provides more specific information and evaluates the student's work.

STUDENT Evaluation

One high school junior spent 150 minutes with this program before completing an evaluation form. The student has experience with two microcomputer programs prior to this program.

An "X" is given on the line below corresponding to the statement with which the student agreed.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	X 77	56
b. I think this program is too hard.	12	7	2
c. The pictures (graphics) were helpful.	96	X 72	48
d. I got lost in this program and didn't know what to do.	28	12	0
e. I really had to think in order to get the right answer.	69	51	33
f. This program helped me when I made a mistake.	82	X 65	48
g. I got all the questions right on the first try.	54	X 32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	X 64	46
i. I would rather work on this program by myself than with other classmates.	69	X 53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	X 54	35
k. If I could, I would take this program home to use it.	89	X 69	49
l. I would rather do this program with a classmate than by myself.	64	47	30
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	6
o. I think my friends would enjoy this program.	96	X 77	58
p. I could not do this program without help from my teacher.	42	28	14
q. This program was too easy for me.	54	35	16
OVERALL STUDENT RATING	92	98 75	58

(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: MICROTYPING II Cost: $

Intended Audience: Grades 6-12 Curriculum: Typing

Instructional Method: Drill Hardware: Apple

Producer, Author, or Distributor: Hayden Software

Stated Objectives

Microtyping II is a self-contained program which allows you to use your Apple II microcomputer to learn to type. You begin with easy exercises to learn the proper use of keys, then move through a series of levels toward fast and accurate typing.

TEACHER Evaluation

Two high school business teachers examined this program for 23 minutes each. Both teachers had experience with ten or more programs.

POSITIVE Comments

"...reports speed and # of errors...easy to follow instructions..."
"...good visual of keyboard..."
High grades were given for all criteria statements.

NEGATIVE Comments

None given.

TEACHER OVERALL RATING (from 0 to 100): 83

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

One teacher recommended this program over Mastertype. The other recommended this program as being "good for practice at any place in the curriculum."

STUDENT Evaluation

No student evaluations were completed for this program.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	56
b. I think this program is too hard.	12	7	2
c. The pictures (graphics) were helpful.	96	72	48
d. I got lost in this program and didn't know what to do.	28	12	0
e. I really had to think in order to get the right answer.	69	51	33
f. This program helped me when I made a mistake.	82	65	48
g. I got all the questions right on the first try.	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	35
k. If I could, I would take this program home to use it.	89	69	49
l. I would rather do this program with a classmate than by myself.	64	47	30
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	6
o. I think my friends would enjoy this program.	96	77	58
p. I could not do this program without help from my teacher.	42	28	14
q. This program was too easy for me.	54	35	16
OVERALL STUDENT RATING	92	75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: MINDSTRETCHER SERIES Cost: $ 125

Intended Audience: Grades 3-9 Curriculum: Logic skills

Instructional Method: Game Hardware: Apple, Commodore

Producer, Author, or Distributor: William Batcher, Island Software

Stated Objectives

This series was specifically designed for gifted and talented students in grades 3 through 9. Talented students do not just play games; they look for winning strategies; they analyze patterns; they develop charts of the previous moves made by the computer; they are challenged to solve problems.

TEACHER Evaluation

One fourth grade teacher examined this program for 30 minutes. The teacher had prior experience with over ten programs.

POSITIVE Comments

The teacher gave the program exceptionally high grades in all criteria areas. "...children love it..."

NEGATIVE Comments

None given.

TEACHER OVERALL RATING (from 0 to 100): 100

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...students enjoy explaining the program to the next student getting ready to use it..." "...an excellent memory stimulant..." The teacher agreed, "This microcomputer program introduces a new content area and additional skills not currently required of my students and I would welcome it as an essential new part of the instructional unit."

STUDENT Evaluation

Seven fourth graders examined this program for an average of 25 minutes each. The students had little prior experience with microcomputer programs, although one student indicated experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	100 / 98	77	56
b. I think this program is too hard.	14 / 12	7	2
c. The pictures (graphics) were helpful.	86 / 96	72	48
d. I got lost in this program and didn't know what to do.	0 / 28	12	3
e. I really had to think in order to get the right answer.	100 / 69	51	33
f. This program helped me when I made a mistake.	100 / 82	65	48
g. I got all the questions right on the first try.	0 / 54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	71 / 82	64	46
i. I would rather work on this program by myself than with other classmates.	0 / 69	53	38
j. I would like to be graded by my teacher on the work I did with this program.	29 / 73	54	35
k. If I could, I would take this program home to use it.	100 / 89	69	49
l. I would rather do this program with a classmate than by myself.	86 / 64	47	30
m. This program was a waste of my time.	14 / 24	13	2
n. This program is too long.	0 / 32	19	6
o. I think my friends would enjoy this program.	86 / 96	77	58
p. I could not do this program without help from my teacher.	29 / 42	28	14
q. This program was too easy for me.	0 / 54	35	16
OVERALL STUDENT RATING	88 / 92	75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: MOTION PROBLEMS Cost: $ 40

Intended Audience: Grades 9-12 Curriculum: Science, Math

Instructional Method: Tutorial Hardware: TRS 80

Producer, Author, or Distributor: Modular Educational Programs

Stated Objectives

Solving uniform motion problems for vehicles traveling in opposite directions.

TEACHER Evaluation

No teacher evaluations were completed on this program.

POSITIVE Comments

NEGATIVE Comments

TEACHER OVERALL RATING (from 0 to 100):

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

STUDENT Evaluation

Seven sophomores examined this program for an average of 14 minutes each. Four additional sophomores stopped the program and did not complete evaluation forms. Each one of these four students indicated they "got bored."

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	56 **14**
b. I think this program is too hard.	12 **14**	7	2
c. The picturer (graphics) were helpful.	96	72 **57**	48
d. I got lost in this program and didn't know what to do.	28	12	0 **0**
e. I really had to think in order to get the right answer.	69	51 **43**	33
f. This program helped me when I made a mistake.	82 **86**	65	48
g. I got all the questions right on the first try.	54	32 **29**	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	46 **29**
i. I would rather work on this program by myself than with other classmates.	89 **71**	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	35 **29**
k. If I could, I would take this program home to use it.	89	69	49 **43**
l. I would rather do this program with a classmate than by myself.	64	47	30 **29**
m. This program was a waste of my time.	24	13 **14**	2
n. This program is too long.	32	19 **14**	6
o. I think my friends would enjoy this program.	96	77	58 **43**
p. I could not do this program without help from my teacher.	42	28	14 **0**
q. This program was too easy for me.	54	35 **29**	16

OVERALL STUDENT RATING

92 — 75 — 58 **63**

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: MR. READWELL Cost: $ 80

Intended Audience: Grades 1-4 Curriculum: Reading

Instructional Method: Skills Practice Hardware: Commodore

Producer, Author, or Distributor: Micrograms Incorporated

Stated Objectives

The reading speed can be controlled. The program provides several reading selections followed by comprehension questions.

TEACHER Evaluation

One fourth grade teacher examined this program for twenty minutes. The teacher had experience with ten or more programs and had used ten or more program with his or her students in class prior to this evaluation.

POSITIVE Comments

"...many stories available..." "...different speeds available..."
High grades were given by the teacher for:
"likely to arouse student interest" "verbal and graphic information is well paced and clear" "learner responses require thought and are a challenge" "instructional approach used suits the program's content"

NEGATIVE Comments

"...when a question is missed, the question is given over and over until finally answered..."
The teacher gave below average grades for:
"program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 90

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"Great for comprehension practice. I would assign a reading group to do a certain story as an assignment. They could take turns doing the selection individually. This would work for all grade levels."

STUDENT Evaluation

Eight fourth graders examined this program for an average of 14 minutes each. Three had experience with ten or more programs; one with none; two with one; and two with seven. Two additional students indicated they stopped the program early because they "got bored."

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	56
b. I think this program is too hard.	12	7	2
c. The pictures (graphics) were helpful.	96	72	48
d. I got lost in this program and didn't know what to do.	28	12	0
e. I really had to think in order to get the right answer.	69	51	33
f. This program helped me when I made a mistake.	82	65	48
g. I got all the questions right on the first try.	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	35
k. If I could, I would take this program home to use it.	89	39	49
l. I would rather do this program with a classmate than by myself.	64	47	30
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	6
o. I think my friends would enjoy this program.	96	77	58
p. I could not do this program without help from my teacher.	42	28	14
q. This program was too easy for me.	54	35	16

OVERALL STUDENT RATING

HIGH	AVERAGE	LOW
92	75	58

(rating given in points 0 to 100)

TITLE: MULTI-LINGUAL WORD PROCESSOR Cost: $ 100

Intended Audience: Grades 9-12 Curriculum: Foreign Language

Instructional Method: Word Processing Hardware: Apple

Producer. Author, or Distributor: Gessler

Stated Objectives

Allows for the normal word processing options of correcting and moving portions of the text, but provides for changing the top row of the keyboard to the additional characters necessary for the following languages: Spanish, French, German, Italian, Polish, special math and science symbols... and more.

TEACHER Evaluation

Four high school foreign language teachers examined this program for 45 minutes each. Two had experience with four microcomputer programs prior to the evaluation and two had no experience.

POSITIVE Comments

None given.

NEGATIVE Comments

"...too cumbersome to use; editing is awkward..."
"...very complicated..." "...very poor instruction booklet..."
Low to failing grades were given for:
"likely to arouse student interest" "documents and printed guides give sufficient support"

TEACHER OVERALL RATING (from 0 to 100):

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

30

Comments on program utilization

None given.

STUDENT Evaluation

No student evaluations were completed for this program.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	56
b. I think this program is too hard.	12	7	2
c. The pictures (graphics) were helpful.	96	72	48
d. I got lost in this program and didn't know what to do.	28	12	0
e. I really had to think in order to get the right answer.	69	51	33
f. This program helped me when I made a mistake.	82	65	48
g. I got all the questions right on the first try.	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	35
k. If I could, I would take this program home to use it.	89	69	49
l. I would rather do this program with a classmate than by myself.	64	47	30
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	6
o. I think my friends would enjoy this program.	96	77	58
p. I could not do this program without help from my teacher.	42	28	14
q. This program was too easy for me.	54	35	16
OVERALL STUDENT RATING	92	75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: MUSIC THEORY Cost: $ 36

Intended Audience: Grades 6-12 Curriculum: Music

Instructional Method: Drill and Practice Hardware: Apple

Producer, Author, or Distributor: MECC

Stated Objectives

Eighteen music theory programs combine graphics and sound for drill and practice on music fundamentals: terms and notations, rhythm, pitch, intervals, scales, and chords. Various levels of difficulty and recording sheets for summary scores are possible.

TEACHER Evaluation

Five junior high school music teachers examined this program for an average of 40 minutes each. Four of the teachers had no experience with microcomputer programs, and one had experience with ten or more.

POSITIVE Comments

"...aids in ear training..." "...comprehensive in cover all areas of music theory..."

High grades were given for:
"content of the program is accurate" "verbal and graphic information is well paced and clear" "relevant testing is consistently provided"

NEGATIVE Comments

"...there is a 33 1/3 chance a student could guess correctly without knowing the term at all..."

Below average grades were given for:
"likely to arouse student interest" "provides sufficient review without unnecessary redundancy" "provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 81

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...use for independent study...use in choral music for ear training..."
"...recommended over Practical Music Theory..."

STUDENT Evaluation

Sixteen seventh, eighth, and ninth graders examined this program for an average of 27 minutes each. Five students had no experience with micrcomputer programs; four had experience with one program; three with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	81 / 77	56
b. I think this program is too hard.	12	13 / 7	2
c. The pictures (graphics) were helpful.	96	75 / 72	48
d. I got lost in this program and didn't know what to do.	28	12	0 / 0
e. I really had to think in order to get the right answer.	69	50 / 51	33
f. This program helped me when I made a mistake.	82	69 / 65	48
g. I got all the questions right on the first try.	54	31 / 32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	75 / 64	46
i. I would rather work on this program by myself than with other classmates.	69	75 / 53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	25 / 35
k. If I could, I would take this program home to use it.	89	81 / 69	49
l. I would rather do this program with a classmate than by myself.	64	47	19 / 30
m. This program was a waste of my time.	24	13 / 13	2
n. This program is too long.	32	25 / 19	6
o. I think my friends would enjoy this program.	96	77	44 / 58
p. I could not do this program without help from my teacher.	42	28	13 / 14
q. This program was too easy for me.	54	31 / 35	16
OVERALL STUDENT RATING	92	76 / 75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: THE NEW STEP BY STEP Cost: $ 103

Intended Audience: Grades 6-12 Curriculum: Computer skills

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: Program Design, Inc., and Carolina Biological

Stated Objectives

Teaches programming skills that are common to all small BASIC-speaking computers.

TEACHER Evaluation

Five junior and senior high school math and science teachers examined this program for an average of 54 minutes each. All five had prior experience with ten or more programs. Two of the teachers indicated experience with using ten or more programs with students in the classroom.

POSITIVE Comments

"...students may work on their own..." "...interest grows as programs develop..."
High grades were given for:
"content of the program is accurate" "relevant practice or testing is consistently provided"

NEGATIVE Comments

"...inadequate help on incorrect responses..."
Below average grades were given for:
"program likely to arouse student interest" "feedback is consistent and provides remediation"

TEACHER OVERALL RATING (from 0 to 100): 71

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

The program was acceptable to the teachers as a basic supplement to other teaching materials. One teacher recommended this program over the program BASIC Building Blocks.

STUDENT Evaluation

Twenty-three students representing grades fifth through ninth averaged 38 minutes each in examination of this program. Two students indicated no previous experience with a microcomputer program, nine indicated experience with ten or more. Twenty of the 23 indicated they had to stop the program and go on to their next class before they finished the program to their satisfaction, but only 57% agreed that they would like to do the program again.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	57 56
b. I think this program is too hard.	12	9 7	2
c. The pictures (graphics) were helpful.	96	72	35 48
d. I got lost in this program and didn't know what to do.	28	12	4 0
e. I really had to think in order to get the right answer.	69	48 51	33
f. This program helped me when I made a mistake.	82	65	52 48
g. I got all the questions right on the first try.	54	32	17 10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	43 46
i. I would rather work on this program by myself than with other classmates.	69	43 53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	43 54	35
k. If I could, I would take this program home to use it.	89	69	39 49
l. I would rather do this program with a classmate than by myself.	64	48 47	30
m. This program was a waste of my time.	24	22 13	2
n. This program is too long.	32	52 19	6
o. I think my friends would enjoy this program.	96	77	61 58
p. I could not do this program without help from my teacher.	42	26 28	14
q. This program was too easy for me.	54	43 35	16
OVERALL STUDENT RATING	92	72 75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: NOUNS AND PRONOUNS Cost: $ 34

Intended Audience: Grades 3-7 Curriculum: Language Arts

Instructional Method: Tutorial and Drill Hardware: Apple

Producer, Author, or Distributor: Troll & Hartley Courseware

Stated Objectives

This is a comprehensive, multi-level program on the use of nouns and pronouns. It is ideal for individualizing instruction. A concept or rule is introduced, followed by practice which requires the student to apply the rule. Included in the 15 lessons are: "Identification of Nouns," "Singular and Plural Possessives," "Selecting the Noun which the Pronoun Represents."

TEACHER Evaluation

No teacher evaluations were completed for this program.

POSITIVE Comments

NEGATIVE Comments

TEACHER OVERALL RATING (from 0 to 100):

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

STUDENT Evaluation

Twenty-five fifth graders examined this program for an average of 14 minutes each. Most of the students had experience with fewer than three programs.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	52 56
b. I think this program is too hard.	12	8 7	2
c. The pictures (graphics) were helpful.	96	72	28 48
d. I got lost in this program and didn't know what to do.	28	16 12	0
e. I really had to think in order to get the right answer.	69	52 51	33
f. This program helped me when I made a mistake.	82	68 65	48
g. I got all the questions right on the first try.	54	32 32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64 64	46
i. I would rather work on this program by myself than with other classmates.	69	64 53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	56 54	35
k. If I could, I would take this program home to use it.	89	69	52 49
l. I would rather do this program with a classmate than by myself.	64	47	36 30
m. This program was a waste of my time.	24 24	13	2
n. This program is too long.	32	24 19	6
o. I think my friends would enjoy this program.	96	77	64 58
p. I could not do this program without help from my teacher.	42	32 28	14
q. This program was too easy for me.	54	40 35	16
OVERALL STUDENT RATING	92	75	67 58

(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: ORGANIC CHEMISTRY: ALKANES Cost: $ 60

Intended Audience: Grades 10-12 Curriculum: Science

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: COMPress, Van Nostrand Reinhold

Stated Objectives

Introduction to general principles.

TEACHER Evaluation

One senior high school science teacher examined this program for 40 minutes. The teacher had experience with ten or more programs.

POSITIVE Comments

"...gives a rapid review and varied recall of data is required of the student..."
No exceptionally high grades were given.

NEGATIVE Comments

"...simply does not go into enough depth..."
Average to below average grades were given for:
"likely to arouse student interest" "learner responses require thought and are a challenge" "program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 75

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...for review only..."

No student evaluations were completed for this program.

TITLE: ORGANIC CHEMISTRY: SUBSTITUTE Cost: $60

Intended Audience: Grades 10-12 Curriculum: Science

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: COMPress, Van Nostrand Reinhold

Stated Objectives

General introudction and application of principles and concepts.

TEACHER Evaluation

One senior high school science teacher examined this program for 35 minutes. The teacher had experience with ten or more programs.

POSITIVE Comments

"...gives diversified samples..."
High grades were given for:
"content of the program is accurate" "verbal and graphic information is well paced and accurate" "program provides sufficient review without unnecessary redundancy"

NEGATIVE Comments

Below average grades were given for:
"program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 95

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"The system uses a very practical format of symbols and diagrams that the student should be exposed to and this disk allows quick consumption without massive reading either in the program or in a text."

No student evaluations were completed for this program.

TITLE: OUR BODIES Cost: $ 18

Intended Audience: Grades 1-4 Curriculum: Health

Instructional Method: Tutorial Hardware: Apple, Commodore

Producer, Author, or Distributor: Right On Programs

Stated Objectives

A simple approach to body systems and what they do.

TEACHER Evaluation

One fourth grade teacher examined this program for ten minutes. The teacher had experience with ten or more microcomputer programs.

POSITIVE Comments

"...nice graphic given for correct answer..."
High grades were given by the teacher for:
"program meets its own stated objectives"
"program is suited for its intended audience"

NEGATIVE Comments

Average grades were given for:
"likely to arouse student interest"
"program provides sufficient review without unnecessary redundancy"
"feedback is consistent and provides remediation"
"provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 50

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

None given.

STUDENT Evaluation

Four fourth grade students examined this program for an average of 18 minutes each. Three students had prior experience with one microcomputer program; one student had experience with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	100	77	56
b. I think this program is too hard.	12	7	0 2
c. The pictures (graphics) were helpful.	100	72	48
d. I got lost in this program and didn't know what to do.	28	12	0 0
e. I really had to think in order to get the right answer.	75	51	33
f. This program helped me when I made a mistake.	75	65	48
g. I got all the questions right on the first try.	54	32	25 10
h. Compared to the other times I have studied this subject, this program was fantastic.	75	64	46
i. I would rather work on this program by myself than with other classmates.	75	53	36
j. I would like to be graded by my teacher on the work I did with this program.	75	54	35
k. If I could, I would take this program home to use it.	100	69	49
l. I would rather do this program with a classmate than by myself.	64	47	25 30
m. This program was a waste of my time.	24	13	0 2
n. This program is too long.	32	19	0 6
o. I think my friends would enjoy this program.	100	77	58
p. I could not do this program without help from my teacher.	42	28	25 14
q. This program was too easy for me.	50	35	18
OVERALL STUDENT RATING	92	75	51 58

(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: OUR SOLAR SYSTEM Cost: $30

Intended Audience: Grades 5-9 Curriculum: Science

Instructional Method: Drill and Tutorial Hardware: Apple

Producer, Author, or Distributor: Little Shaver Software

Stated Objectives

The program fosters understanding of the cosmic wonders of our part of the universe. The program has explanation of each planet and its relationship with the sun, earth, and other planets. Teacher management elements are included.

TEACHER Evaluation

One fourth grade teacher examined this program for 20 minutes.
The teacher had experience with ten or more programs.

POSITIVE Comments

"...generally, the information given is sound and the graphic reward is good..."
High grades were given for:
"program meets its own stated objectives"
"program is suited for its intended grade level"

NEGATIVE Comments

"After the child has done the program once, the same information is given again with same questions in a different order."
Below average grades were given for:
"likely to arouse student interest" "verbal and graphic information is well paced and clear" "program provides sufficient review without unnecessary redundancy" "learner responses require thought and are a challenge"

TEACHER OVERALL RATING (from 0 to 100):

94	74	54	50
Exceptionally HIGH	Average	Exceptionally LOW	

Comments on program utilization

"...possibly for third graders, but best suited for fourth to sixth grade..."

STUDENT Evaluation

Seven fourth graders examined this program for an average of 17 minutes each. Three had experience with ten or more programs; one with nine; one with five; and one with four.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	57 56
b. I think this program is too hard.	14 12	7	2
c. The pictures (graphics) were helpful.	96	72	57 48
d. I got lost in this program and didn't know what to do.	28	14 12	0
e. I really had to think in order to get the right answer.	69	51	33 14
f. This program helped me when I made a mistake.	82	71 65	48
g. I got all the questions right on the first try.	57 54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	57 46
i. I would rather work on this program by myself than with other classmates.	86 69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	71 73	54	35
k. If I could, I would take this program home to use it.	89	69	57 49
l. I would rather do this program with a classmate than by myself.	64	47	14 30
m. This program was a waste of my time.	24	14 13	2
n. This program is too long.	32	19	0 6
o. I think my friends would enjoy this program.	96	71 77	58
p. I could not do this program without help from my teacher.	42	29 28	14
q. This program was too easy for me.	54	43 35	16
OVERALL STUDENT RATING	92	75	62 58

(rating given is points 0 to 100)

HIGH AVERAGE LOW

TITLE: PARIS EN METRO Cost: $81

Intended Audience: Grade 7-12 Curriculum: Foreign Language, French

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: D. C. Heath

Stated Objectives

To become familiar with the subway system in Paris, le metro
To recognize several important places of interest and know how to visit them by subway
To practice the present tense forms of the verb aller
To practice using ordinal numbers

TEACHER Evaluation

No teacher evaluation form was completed for this program.

POSITIVE Comments

NEGATIVE Comments

TEACHER OVERALL RATING (from 0 to 100):

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

STUDENT Evaluation

Twenty-seven ninth and tenth graders completed evaluation forms on this program. Each spent an average of 42 minutes with the program. Ten of the students indicated experience with ten or more microcomputer programs prior to the evaluation. Eight of the students indicated they had to stop the program early and leave (for other classes). One student stopped the program early because he or she "got bored."

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	89	77	56
b. I think this program is too hard.	15	7	2
c. The pictures (graphics) were helpful.	100	72	48
d. I got lost in this program and didn't know what to do.	28	12	0
e. I really had to think in order to get the right answer.	67	51	33
f. This program helped me when I made a mistake.	96	65	48
g. I got all the questions right on the first try.	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	85	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	35
k. If I could, I would take this program home to use it.	89	69	49
l. I would rather do this program with a classmate than by myself.	64	47	30
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	6
o. I think my friends would enjoy this program.	96	77	58
p. I could not do this program without help from my teacher.	42	28	14
q. This program was too easy for me.	54	35	16
OVERALL STUDENT RATING	92	75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: PATTERN LAYOUT SIMULATOR Cost: $63

Intended Audience: Grades 8-12 Curriculum: Home Economics

Instructional Method: Simulation Hardware: Apple

Producer, Author, or Distributor: Orange Juice Software Systems

Stated Objectives

The student will receive practice in best positions for layout of pattern pieces on a given piece of material. Using the computer, the student will design an appropriate layout for the pattern pieces given.

TEACHER Evaluation

One home economics teacher (for a clothing class in grades seven and eight) examined the program for sixty minutes. The teacher had previous experience with eight microcomputer programs.

POSITIVE Comments

"The graphics are very good."
The teacher gave the program high grades for:
"suited for intended grade level" "likely to arouse student interest" "content of the program is accurate" "feedback is consistent and provides remediation" "program provides a clear evaluation of the student's performance"

NEGATIVE Comments

None given.

TEACHER OVERALL RATING (from 0 to 100): 80

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...used for both individual and group study as an introduction to pattern layout." The teacher accepted this program as material which provides basic support to skills already taught in the classroom.

STUDENT Evaluation

Eight eighth graders examined this program for an average of 14 minutes each. The students had limited prior experience with microcomputer programs as two had no previous experience, three had experience with one program, and two with three programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	100	77	56
b. I think this program is too hard.	12	7	0 2
c. The pictures (graphics) were helpful.	100 96	72	48
d. I got lost in this program and didn't know what to do.	28	12	0 0
e. I really had to think in order to get the right answer.	69	51	0 33
f. This program helped me when I made a mistake.	88 82	65	48
g. I got all the questions right on the first try.	50 54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	100 82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	38 36
j. I would like to be graded by my teacher on the work I did with this program.	100 73	54	35
k. If I could, I would take this program home to use it.	89	63 69	49
l. I would rather do this program with a classmate than by myself.	63 64	47	30
m. This program was a waste of my time.	24	13	0 2
n. This program is too long.	32	13 19	6
o. I think my friends would enjoy this program.	88 96	77	58
p. I could not do this program without help from my teacher.	42	25 28	14
q. This program was too easy for me.	54	38 35	16
OVERALL STUDENT RATING	92	83 75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: PIANO NOTES Cost: $10

Intended Audience: Grades 4-8 Curriculum: Music

Instructional Method: Rote drill Hardware: Commodore

Producer, Author, or Distributor: JMH Software of Minnesota

Stated Objectives

Practice in matching notes with the corresponding piano keys.

TEACHER Evaluation

One grade school music teacher evaluated this program. The teacher had prior experience with nine microcomputer programs, and had used three programs with students in class. The teacher examined this program for seven minutes.

POSITIVE Comments

"Gives the child help when he makes mistakes and praise when he does well."

High grades were given for:
"content is accurate" "instructional approach used suits the program's content"

NEGATIVE Comments

"...there is no easy escape from the program...one can only start the program after completion, or turn off the computer and reload..."
Below average grades were given for:
"learner responses require thought and are a challenge"

TEACHER OVERALL RATING (from 0 to 100): 85

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"This program helps review the name of piano notes, sharps and flats... it is helpful for independent study."

STUDENT Evaluation

Twenty-six third, fourth, fifth and sixth graders worked with the program for an average of four minutes each prior to completing an evaluation form. Two of the 26 indicated experience with ten or more microcomputer programs prior to the evaluation. A majority of the students had experience with fewer than two programs prior to this evaluation.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	88 / 77	56
b. I think this program is too hard.	12	4 / 7	2
c. The pictures (graphics) were helpful.	96	77 / 72	48
d. I got lost in this program and didn't know what to do.	28	4 / 12	0
e. I really had to think in order to get the right answer.	69	42 / 51	33
f. This program helped me when I made a mistake.	82	88 / 65	48
g. I got all the questions right on the first try.	54	42 / 32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	62 / 64	46
i. I would rather work on this program by myself than with other classmates.	69	62 / 53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	50 / 54	35
k. If I could, I would take this program home to use it.	89	77 / 69	49
l. I would rather do this program with a classmate than by myself.	64	58 / 47	30
m. This program was a waste of my time.	24	8 / 13	2
n. This program is too long.	32	12 / 19	6
o. I think my friends would enjoy this program.	96	85 / 77	58
p. I could not do this program without help from my teacher.	42	19 / 28	14
q. This program was too easy for me.	54	54 / 35	16
OVERALL STUDENT RATING	92	69 / 75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: PLACE SETTING, MEAL SERVICE, AND TABLE MANNERS Cost: $95

Intended Audience: Grades 6-12 Curriculum: Home Economics

Instructional Method: Simulation Hardware: Apple

Producer, Author, or Distributor: Orange Juice Software

Stated Objectives

The student will learn the proper placement for place mats, place settings and glasses, as well as coffee cup, bread-and-butter plate and centerpiece. The student will learn various types of meal service including plate, family, English and buffet. Table manners involving proper use of fork, knife, spoon, and napkin will be tested with the student placed in various situations.

TEACHER Evaluation

One junior high school home economics teacher examined this program for 45 minutes. The teacher had experience with ten or more programs.

POSITIVE Comments

"...student participation is excellent throughout the program..."
The teacher gave high grades for:
"suited for its intended grade level"
"likely to arouse student interest"
"learner responses require thought and are a challenge"
"instructional approach used suits the program's content"

NEGATIVE Comments

"The program doesn't allow the student to accept or reject table setting items in order to arrange table settings for different menus."
The teacher indicated average grades for:
"content of the program is accurate"

TEACHER OVERALL RATING (from 0 to 100): 89

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...basic support to table setting and manner units..."

STUDENT Evaluation

Six eighth grade students examined this program for 23 minutes each. of the six, five had experience with one other microcomputer program and one experience with three previous programs.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	83 / 77	56
b. I think this program is too hard.	12	7	0 / 2
c. The pictures (graphics) were helpful.	96 / 100	72	48
d. I got lost in this program and didn't know what to do.	28	12	0 / 0
e. I really had to think in order to get the right answer.	69	50 / 51	33
f. This program helped me when I made a mistake.	82 / 100	65	48
g. I got all the questions right on the first try.	54	32	17 / 10
h. Compared to the other times I have studied this subject, this program was fantastic.	82 / 100	64	46
i. I would rather work on this program by myself than with other classmates.	69	50 / 53	36
j. I would like to be graded by my teacher on the work I did with this program.	73 / 83	54	35
k. If I could, I would take this program home to use it.	89 / 83	69	49
l. I would rather do this program with a classmate than by myself.	64 / 67	47	30
m. This program was a waste of my time.	24	13	0 / 2
n. This program is too long.	32	19 / 17	6
o. I think my friends would enjoy this program.	96 / 83	77	58
p. I could not do this program without help from my teacher.	42	28 / 17	14
q. This program was too easy for me.	54	35 / 33	16
OVERALL STUDENT RATING	92 / 96	75	58

(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: PUNCTUATION PROGRESS Cost: $43

Intended Audience: Grades 3-6 **Curriculum:** Language Arts

Instructional Method: Game **Hardware:** Commodore

Producer, Author, or Distributor: Micrograms

Stated Objectives

Brief paragraphs are given and students can compete to see who identifies mistakes in punctuation first. Up to four players can take part in three different programs.

TEACHER Evaluation

One fourth grade teacher examined this program for 20 minutes. The teacher had experience with ten or more programs.

POSITIVE Comments

"...good competition...like the game format..."
High grades were given for:
"content of this program is accurate" "relevant practice or testing is consistently provided" "instructional approach used suits the program's content"

NEGATIVE Comments

"It uses the same sentences over and over...just in a different sequence."

TEACHER OVERALL RATING (from 0 to 100): 75

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...would use as a review after study of the punctuation rules..."

STUDENT Evaluation

Thirteen fourth graders examined this program for 12 minutes each. Two had no prior experience with microcomputer programs; two with three; two with seven; and four with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	62 56
b. I think this program is too hard.	15 12	7	2
c. The pictures (graphics) were helpful.	96	72	38 48
d. I got lost in this program and didn't know what to do.	31 28	12	0
e. I really had to think in order to get the right answer.	69	51	23 33
f. This program helped me when I made a mistake.	82	69 65	48
g. I got all the questions right on the first try.	54	32	15 10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	62 64	46
i. I would rather work on this program by myself than with other classmates.	69	53	23 36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	38 35
k. If I could, I would take this program home to use it.	89	69	38 49
l. I would rather do this program with a classmate than by myself.	85 64	47	30
m. This program was a waste of my time.	24	15 13	2
n. This program is too long.	46 32	19	6
o. I think my friends would enjoy this program.	96	69 77	58
p. I could not do this program without help from my teacher.	42	28	15 14
q. This program was too easy for me.	54	31 35	16
OVERALL STUDENT RATING	92	75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: PUZZLER Cost: $ 55

Intended Audience: Grades 3-10 Curriculum: Language Arts, Reading and comprehension skills

Instructional Method: Tutorial and test Hardware: Apple

Producer, Author, or Distributor: Sunburst Communications

Stated Objectives

The Puzzler is a package of lessons designed to foster the ability to use predicting/confirming strategies in reading. Students learn to make story predictions using an ever-increasing number of syntactic, semantic and pragmatic clues. As the story is revealed, students learn that some early predictions are no longer congruent with the text or with their knowledge of the real world.

TEACHER Evaluation

One elementary school reading teacher (currently a principal) examined the program for 35 minutes.
The teacher had prior experience with ten or more programs.

POSITIVE Comments

"The reading skills addressed are seldom in other computer programs."
The teacher gave the program exceptionally high grades in all areas of judgment.

NEGATIVE Comments

The teacher noted, "...should indicate 'correctness' of responses given by the student." The program's guide notes, "The stories can have more than one correct answer. The 'no right answer' feature will frustrate some students at first. However, real reading is a personal act where understanding is attained by combining the cues on the page with the background knowledge of the reader. When new words or concepts are encountered, readers need to possess a set of strategies to understand them."

TEACHER OVERALL RATING (from 0 to 100): 90

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

The Puzzler was developed to take advantage of the unique abilities of both teachers and computers. Therefore, a variety of teaching modes are recommended. These include whole and small group lessons, as well as computer-based strategy lesson stories. Predicting/confirming skills are introduced by the teacher through whole group lessons using overhead transparencies to reveal a sample story. Following this introduction, students complete a series of computer-based reading strategy lessons, either individually or in teams. Finally, small group followup with discussion, again using overhead transparencies, is carried out by the teacher.

No student evaluations were completed for this program.

TITLE: RHYMES & RIDDLES Cost: $ 30

Intended Audience: Grades 3-6 Curriculum: Reading, Language Arts

Instructional Method: Game Hardware: Apple, Commodore, IBM

Producer, Author, or Distributor: Spinnaker Software and Marbaugh

Stated Objectives

Students are asked to fill-in the blanks for nursery rhymes, answers to riddles, and famous sayings.

TEACHER Evaluation

One fourth grade teacher examined this program for twenty minutes. The teacher had experience with ten or more microcomputer programs.

POSITIVE Comments

"...similar to hangman, but more interesting than just one word..." The teacher gave the program high grades for: "suited for intended grade level" "likely to arouse student interest" "verbal and graphic information is well paced and clear" "program provides sufficient review without unnecessary redundancy"

NEGATIVE Comments

"...would help in some cases for clues to be given..." Average grades were given for: "program provides a clear evaluation of the student's performance..."

TEACHER OVERALL RATING (from 0 to 100): 85

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...would use as enrichment...help with spelling...could be used in the first grade with help from teacher..."

STUDENT Evaluation

Eight fourth graders examined this program for an average of nine minutes each. Two students had no experience with microcomputer programs; two with one; two with seven; two with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	100	77	56
b. I think this program is too hard.	13	7	2
c. The pictures (graphics) were helpful.	96	72	48
d. I got lost in this program and didn't know what to do.	28	12	0
e. I really had to think in order to get the right answer.	69	51	33
f. This program helped me when I made a mistake.	82	65	48
g. I got all the questions right on the first try.	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	35
k. If I could, I would take this program home to use it.	89	69	49
l. I would rather do this program with a classmate than by myself.	64	47	30
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	6
o. I think my friends would enjoy this program.	96	77	58
p. I could not do this program without help from my teacher.	42	28	14
q. This program was too easy for me.	54	35	16

OVERALL STUDENT RATING

HIGH	AVERAGE	LOW
92	75	58

(rating given in points 0 to 100)

TITLE: ROBOT ODYSSEY I Cost: $ 45

Intended Audience: Grades 5-10 Curriculum: Social Studies & Science

Instructional Method: Tutorial and Simulation Hardware: Apple

Producer, Author, or Distributor: The Learning Company and Marbaugh

Stated Objectives

There are two worlds in the Odyssey to explore. ROBOTROPOLIS is an underground city populated by robots, and the INNOVATION LAB, a robot workshop. In addition, there are three ROBOT TUTORIALS on the disk that explain about life in the Odyssey, including how robots work.

TEACHER Evaluation

One seventh grade math and science teacher examined this program for 90 minutes. The teacher had prior experience with ten or more programs.

POSITIVE Comments

"...challenging, requires a great deal of thinking; also the documentation goes well with the program..."
The program was given high grades for:
"verbal and graphic information is well paced and clear"
"provides sufficient review without unnecessary redundancy"
"provides relevant practice and testing"
"learner responses require thought and are a challenge"

NEGATIVE Comments

"...running through the tutorial is somewhat confusing"

TEACHER OVERALL RATING (from 0 to 100): 95

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...for bored accelerated students, it could be used as a motivator..."

STUDENT Evaluation

Seven seventh graders worked with this program for an average of 39 minutes. Four of the students indicated this was the first microcomputer program they had experienced; one indicated experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	57
b. I think this program is too hard.	29	7	2
c. The pictures (graphics) were helpful.	96	72	86
d. I got lost in this program and didn't know what to do.	29	12	0
e. I really had to think in order to get the right answer.	69	51	57
f. This program helped me when I made a mistake.	82	65	43
g. I got all the questions right on the first try.	54	32	0
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	71
i. I would rather work on this program by myself than with other classmates.	69	53	43
j. I would like to be graded by my teacher on the work I did with this program.	73	54	29
k. If I could, I would take this program home to use it.	89	69	71
l. I would rather do this program with a classmate than by myself.	64	47	57
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	14
o. I think my friends would enjoy this program.	96	77	43
p. I could not do this program without help from my teacher.	42	28	14
q. This program was too easy for me.	54	35	0

OVERALL STUDENT RATING

HIGH	AVERAGE	LOW
92	75	58

(rating given in points 0 to 100)

TITLE: ROCKY'S BOOTS **Cost:** $75

Intended Audience: Grades 2-6 **Curriculum:** Logic skills

Instructional Method: Game **Hardware:** Apple

Producer, Author, or Distributor: Learning Company

Stated Objectives

Games help the child develop logic skills that will be of use throughout life. Players build animated logic machines in order to score points. While building machines,children learn basics of computer circuits.

TEACHER Evaluation

Two third grade teachers examined this program for an average of 18 minutes each. One teacher had prior experience with five programs in the classroom, the other had experience with ten or more.

POSITIVE Comments

"It's a great way to introduce the keyboard."
"Kids like to build things, so they would probably like this."

High grades were given for:
"likely to arouse student interests"
"learner responses require thought and are a challenge"

NEGATIVE Comments

"some of the movement directions were unclear..."
"too much reading at the beginning of the program..."

Average grades were given for:
"documents and printed guides give sufficient support"
"program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 85

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

One teacher saw this program as essential to a new unit and the other accepted the program only as supplemental material.

STUDENT Evaluation

Sixteen third graders worked with this program for an average of 12 minutes each. Fourteen of the 16 had prior experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	81 / 77	56
b. I think this program is too hard.	12	6 / 7	2
c. The pictures (graphics) were helpful.	96	69 / 72	48
d. I got lost in this program and didn't know what to do.	28	31 / 12	0
e. I really had to think in order to get the right answer.	69	51	25 / 33
f. This program helped me when I made a mistake.	82	65	38 / 48
g. I got all the questions right on the first try.	54	63 / 32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	63 / 64	46
i. I would rather work on this program by myself than with other classmates.	69	75 / 53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	50 / 54	35
k. If I could, I would take this program home to use it.	89	63 / 69	49
l. I would rather do this program with a classmate than by myself.	64	47	25 / 30
m. This program was a waste of my time.	24	25 / 13	2
n. This program is too long.	32	19 / 19	6
o. I think my friends would enjoy this program.	96	88 / 77	58
p. I could not do this program without help from my teacher.	42	38 / 28	14
q. This program was too easy for me.	54	56 / 35	16
OVERALL STUDENT RATING	92	87 / 75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: ROOTS/AFFIXES Cost: $

Intended Audience: Grades 3-8 Curriculum: Language Arts

Instructional Method: Tutorial and Drill Hardware: Apple

Producer, Author, or Distributor: Hartley (contact Sandra Nolan)

Stated Objectives

Use and identification of Latin and Greek prefixes and suffixes. Lessons can be modified by the teacher.

TEACHER Evaluation

One junior high school reading teacher examined this program for 40 minutes. The teacher had prior experience with ten or more programs including use of ten or more programs with students in class.

POSITIVE Comments

"...student scores are automatically recorded...strong remediation is provided..."
High grades were given for:
"content of the program is accurate" "program provides sufficient review without unnecessary redundancy" "relevant practice or testing is consistently provided" "documents and printed guides give sufficient support" "provides a clear evaluation of the student's performance"

NEGATIVE Comments

"...graphics are weak..."
Below average grades were given for:
"likely to arouse student interest" "verbal and graphic information is well paced and clear"

TEACHER OVERALL RATING (from 0 to 100): 95

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

The teacher ranked this program to be the best of three examined on the same subject.

STUDENT Evaluation

Seven seventh graders examined this program for an average of 20 minutes each. Four of the students had experience with ten or more microcomputer programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	**57** 56
b. I think this program is too hard.	12	7	**0** 2
c. The pictures (graphics) were helpful.	96	**57** 72	48
d. I got lost in this program and didn't know what to do.	28	12	**0** 0
e. I really had to think in order to get the right answer.	**100** 69	51	33
f. This program helped me when I made a mistake.	**86** 82	65	48
g. I got all the questions right on the first try.	54	32	**0** 10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	**71** 64	46
i. I would rather work on this program by myself than with other classmates.	**86** 69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	**71** 73	54	35
k. If I could, I would take this program home to use it.	89	**71** 69	49
l. I would rather do this program with a classmate than by myself.	64	**43** 47	30
m. This program was a waste of my time.	24	**14** 13	2
n. This program is too long.	32	19	**0** 6
o. I think my friends would enjoy this program.	**100** 96	77	58
p. I could not do this program without help from my teacher.	42	28	**14** 14
q. This program was too easy for me.	54	35	**14** 16
OVERALL STUDENT RATING (rating given in points 0 to 100)	92	**85** 75	58
	HIGH	AVERAGE	LOW

TITLE: SKELETAL SYSTEM Cost: $70

Intended Audience: Grades 6-12 Curriculum: Science

Instructional Method: Tutorial Hardware: Apple, Commodore

Producer, Author, or Distributor: Brain Bank

Stated Objectives

Helps the student learn about the human skeleton -- what a bone is made of, what the major skeletal bones are, and about joints, ligaments and cartilage. Review test also included.

TEACHER Evaluation

Two sixth grade teachers examined the program for an average of 32 minutes each. Both teachers had prior experience with five microcomputer programs.

POSITIVE Comments

"It has three paces from which to choose..."

High grades were given for:
"content of the program is accurate" "feedback is consistent and provides remediation" "learner responses require thought and are a challenge"

NEGATIVE Comments

"I had difficulty reading the letter choices for the answers."

Below average grades were given for:
"documents and printed guides give sufficient support" "program provides a clear evaluation of the student's performance" "verbal and graphic information is well paced and clear"

TEACHER OVERALL RATING (from 0 to 100): 81

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"I would use it for enrichment in the health unit for the sixth grade..." Both teachers agreed, "the program will provide basic support of current material taught."

STUDENT Evaluation

Eleven sixth graders spent an average of 30 minutes each with this program. Five of the students indicated that this was their first microcomputer program experienced. Only one student had prior experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	93	82 / 77	56
b. I think this program is too hard.	12	9 / 7	2
c. The pictures (graphics) were helpful.	96	82 / 72	48
d. I got lost in this program and didn't know what to do.	28	9 / 12	0
e. I really had to think in order to get the right answer.	69	45 / 51	33
f. This program helped me when I made a mistake.	82	82 / 65	48
g. I got all the questions right on the first try.	54	18 / 32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	73 / 64	46
i. I would rather work on this program by myself than with other classmates.	69	55 / 53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	27 / 54	35
k. If I could, I would take this program home to use it.	89	55 / 69	49
l. I would rather do this program with a classmate than by myself.	64	36 / 47	30
m. This program was a waste of my time.	24	18 / 13	2
n. This program is too long.	32	27 / 19	6
o. I think my friends would enjoy this program.	96	73 / 77	58
p. I could not do this program without help from my teacher.	42	27 / 28	14
q. This program was too easy for me.	54	0 / 35	16
OVERALL STUDENT RATING	92	90 / 75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: SHELL GAMES Cost: $30

Intended Audience: Grades 2-10 Curriculum: Problem solving

Instructional Method: Puzzle and game Hardware: Apple

Producer, Author, or Distributor: Apple Computer Company

Stated Objectives

Four games, "The Animated Apple," "The Match Machine," "Mr. Multiple," and "Professor True" offer matching, mulitiple-choice, and true/false quizzes." Over 180 ready to solve problems.

TEACHER Evaluation

No teacher evaluations were completed for this program.

POSITIVE Comments

NEGATIVE Comments

TEACHER OVERALL RATING (from 0 to 100):

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

STUDENT Evaluation

Four eighth graders examined this program for an average of 22 minutes each. Three of the students had experience with te(or more programs prior to the evaluation.

STUDENT GROUP AGREEMENT PERCE /TAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	a. 100	98	77	56
b. I think this program is too hard.	b. 0	12	7	2
c. The pictures (graphics) were helpful.	c. 50	96	72	48
d. I got lost in this program and didn't know what to do.	d. 0	28	12	0
e. I really had to think in order to get the right answer.	e. 25	69	51	33
f. This program helped me when I made a mistake.	f. 75	82	65	48
g. I got all the questions right on the first try.	g. 50	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	h. 100	82	64	46
i. I would rather work on this program by myself than with other classmates.	i. 75	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	j. 100	73	54	35
k. If I could, I would take this program home to use it.	k. 100	89	69	49
l. I would rather do this program with a classmate than by myself.	l. 25	64	47	30
m. This program was a waste of my time.	m. 0	24	13	2
n. This program is too long.	n. 0	32	19	6
o. I think my friends would enjoy this program.	o. 100	96	77	58
p. I could not do this program without help from my teacher.	p. 25	42	28	14
q. This program was too easy for me.	q. 50	54	35	16
OVERALL STUDENT RATING	96	92	75	58

(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: SPANISH GRAMMAR REVIEW/ Present Verbs Cost: $ 36

Intended Audience: Grades 7-12 Curriculum: Foreign Language Spanish

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: Gessler Educational Software

Stated Objectives

To teach and review 1) the conjugation of regular and irregular verbs in the Present Tense and 2) correct usage of the irregular verbs SER and ESTAR. For beginning and intermediate students.

TEACHER Evaluation

One ninth grade Spanish teacher worked this program for 20 minutes. The teacher had previous experience with over ten microcomputer programs.

POSITIVE Comments

"Very carefully designed review of 'ar,' 'er' and 'ir' verbs.

The program was given high grades for:
"meets its own stated objectives" "content is accurate" "verbal and graphic information is well paced" "learner responses require thought and are a challenge"

NEGATIVE Comments

"Many of the 'user' and 'estar' exercises are using 'ser' only and not as much use of 'estar.'"

No low grades were given for this program.

TEACHER OVERALL RATING (from 0 to 100): 90

94 Exceptionally HIGH | 74 Average | 54 Exceptionally LOW

Comments on program utilization

"I would use this activity for students to review what they've learned; as a self-help unit for the students who are slower to grasp the grammar elements; and as a reinforcer by pairing a strong student with one who is weaker in the skills being reviewed."
The teacher agreed, "This microcomputer program introduces a new content area and additional skills not currently required of my students and I would welcome it as an essential new part of the instructional unit."

STUDENT Evaluation

Four ninth grade students examined this program. Each student spent an average of 28 minutes with the program. Three of the students had experience with ten or more programs, and one student had no prior microcomputer experience.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	100 / 98	77	56
b. I think this program is too hard.	25 / 12	7	2
c. The pictures (graphics) were helpful.	96	75 / 72	48
d. I got lost in this program and didn't know what to do.	28	12	0 / 0
e. I really had to think in order to get the right answer.	100 / 69	51	33
f. This program helped me when I made a mistake.	100 / 82	65	48
g. I got all the questions right on the first try.	54	32	0 / 10
h. Compared to the other times I have studied this subject, this program was fantastic.	100 / 82	64	46
i. I would rather work on this program by myself than with other classmates.	75 / 69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	25 / 35
k. If I could, I would take this program home to use it.	100 / 89	69	49
l. I would rather do this program with a classmate than by myself.	64	50 / 47	30
m. This program was a waste of my time.	24	13	0 / 2
n. This program is too long.	32	19	0 / 6
o. I think my friends would enjoy this program.	100 / 96	77	58
p. I could not do this program without help from my teacher.	42	25 / 28	14
q. This program was too easy for me.	54	35	0 / 16

OVERALL STUDENT RATING

HIGH	AVERAGE	LOW
92	89 / 75	58

(rating given in points 0 to 100)

TITLE: STICKYBEAR ABC Cost: $ 40

Intended Audience: Grades 1-4 Curriculum: Language Arts

Instructional Method: Drill and game Hardware: Apple

Producer, Author, or Distributor: XEROX Educational Publications

Stated Objectives

Designed for learning the letters of the alphabet. Each letter of the alphabet is represented by two completely different, fully animated pictures with sound. Pressing the letter "B" (on the keyboard) will bring to the screen a bee buzzing around Stickybear.

TEACHER Evaluation

Five elementary school teachers examined this program for an average of 25 minutes each. All five had prior experience with ten or more programs.

POSITIVE Comments

"Good variety of pictures for each letter...an easy program to run..."
"...graphics and sound are great..."
The program was given high grades for:
"likely to arouse student interest" "verbal and graphic information is well paced and clear" "program meets its own stated objectives"

NEGATIVE Comments

"...if press wrong key, child would still get a response...needs supervision to be sure he or she is doing the program correctly..."
Below average grades were given for:
"learner responses require thought and are a challenge" "documents and printed guides give sufficient support" "program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 86

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"to reinforce alphabet recognition"
"to identify the sound the letter makes by the picture represented"
"...can be used in special education classes..."

STUDENT Evaluation

No student evaluation forms were completed for this program.

TITLE: STICKYBEAR SHAPES Cost: $40

Intended Audience: Grades 3-6 Curriculum: Logic skills

Instructional Method: Drill and game Hardware: Apple

Producer, Author, or Distributor: XEROX Educational Publications

Stated Objectives

Helps children learn about shapes and relationships between sizes. In three colorfully-animated activities, learners name a shape, pick a shape, or find a shape.

TEACHER Evaluation

Three elementary school teachers, two from kindergarden and one first grade teacher, spent an average of eight minutes with this program before completing an evaluation form. All three had experience with ten or more programs prior to the evaluation.

POSITIVE Comments

"...the children loved doing this program; it was by far the top one for getting and holding attention..."
Average grades were given for:
"program meets its own stated objectives" "documents and printed guides give sufficient support"

NEGATIVE Comments

"...some pictures were very difficult for the children to identify..."
"...a helper would have to be present at all times..."

Below average grades were given for:
"program provides a clear evaluation of the student's performance"
"learner responses require thought and are a challenge" "relevant practice or testing is consistently provided" "provides sufficient review without unnecessary redundancy"

TEACHER OVERALL RATING (from 0 to 100): 73

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

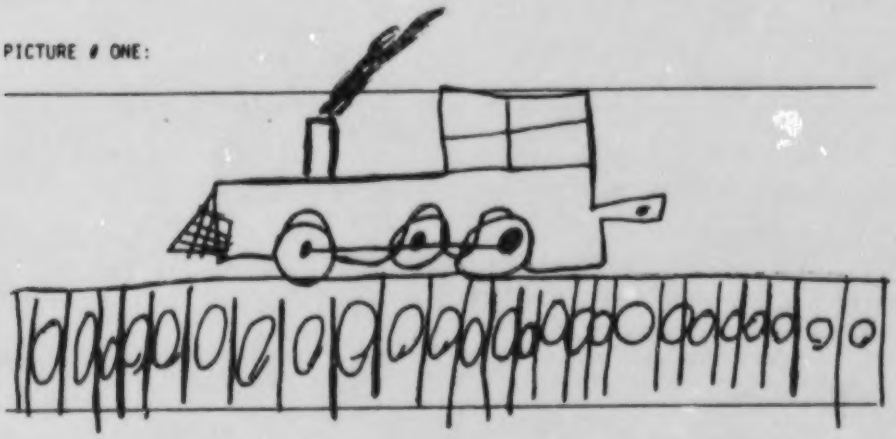
Comments on program utilization

"Visual discrimination is an area of weakness at first grade level and this program would help children who are weak...."

Student Evaluation

Forty first graders examined this program for an average of 18 minutes each.
Thirty-eight of the forty agreed that they "would like to do the program again."
Thirty-seven agreed, "I think my friends in class would like to do this program."
Over one third of the students admitted that they could not operate the program without help from their teacher.
Thirty-nine of the forty agreed, "I liked the pictures in this program."

PICTURE # ONE:



PICTURE # TWO:

TITLE: STORY MACHINE Cost: $35

Intended Audience: Grades K-4 Curriculum: Writing

Instructional Method: Game Hardware: Apple, Commodore

Producer, Author, or Distributor: Spinnaker & Troll Micro

Stated Objectives

Story Machine is an educational game that helps children learn to write sentences, paragraphs, and simple stories. The stories are acted out by animation determined by the terms selected from a large menu of nouns prepositions, verbs and other parts of speech.

TEACHER Evaluation

Two elementary school teachers examined this program for an average of 25 minutes each. One had experience with two microcomputer programs prior to the evaluation, and the other experience with ten or more.

POSITIVE Comments

"The graphics are appealing to the student."
No high grades were given to this program.

NEGATIVE Comments

"Seems to be very limited in vocabulary and limited in flexibility."
Below average grades were given for:
"program provides sufficient review without unnecessary redundancy"
"learner responses require thought and are a challenge"
"documents and guides give sufficient support"

TEACHER OVERALL RATING (from 0 to 100): 53

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

None given.

STUDENT Evaluation

Twelve first graders examined this program for an average of 12 minutes each. Eleven agreed, "I would like to do this program again." All agree, "I think my friends in class would like to do this program." None of the students felt they could do the program without help from the teacher. All agreed, "I liked the pictures in this program."
Eight fourth graders examined the program for an average of 19 minutes each. Three had prior experience with ten or more programs. Experience of the other five ranged from one program to seven.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

Agreement of the 4th graders:

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	75		
	98	77	56
b. I think this program is too hard.	13		
	12	7	2
c. The pictures (grephics) were helpful.	100		
	96	72	48
d. I got lost in this program and didn't know what to do.	38		
	28	12	0
e. I really had to think in order to get the right answer.	88		
	69	51	33
f. This program helped me when I made a mistake.	88		
	82	65	48
g. I got all the questions right on the first try.			13
	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.		75	
	82	64	46
i. I would rather work on this program by myself than with other classmates.			25
	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.		63	
	73	54	35
k. If I could, I would take this program home to use it.			50
	89	69	49
l. I would rather do this program with a classmate than by myself.		50	
	64	47	30
m. This program was a waste of my time.		13	
	24	13	2
n. This program is too long.			0
	32	19	6
o. I think my friends would enjoy this program.	100		
	96	77	58
p. I could not do this program without help from my teacher.	63		
	42	28	14
q. This program was too easy for me.		38	
	54	35	16
OVERALL STUDENT RATING			57
	92	75	58

(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: SURVIVAL MATH Cost: $ 50

Intended Audience: Grades 4-8 Curriculum: Math

Instructional Method: Simulations Hardware: Apple

Producer, Author, or Distributor: Sunburst Communications

Stated Objectives

This package includes four simulations that apply math skills to everyday life. Each puts the student in a situation that requires the use of math as a basis for making sound judgments. Programs include: Smart Shopper, Hot Dog Stand, Travel Agent, and Foreman's Assistant.

TEACHER Evaluation

One eighth grade math teacher examined this program for ten minutes. The teacher had prior experience with over ten microcomputer programs. The teacher examined the program "Hot Dog Stand."

POSITIVE Comments

High grades were given for:
"program is likely to arouse student interest" "content of the program is accurate" "verbal and graphic information is well paced and clear" "relevant practice or testing is consistently provided"

NEGATIVE Comments

None given.

TEACHER OVERALL RATING (from 0 to 100): 80

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

STUDENT Evaluation

Eight students from the eighth grade spent an average of 20 minutes each with the program "Hot Dog Stand." The group represented a wide variety of previous experience levels with microcomputer programs, ranging from no experience to experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	100	77	56
b. I think this program is too hard.	12	7	0 2
c. The pictures (graphics) were helpful.	96	72	63 48
d. I got lost in this program and didn't know what to do.	28	13 12	0
e. I really had to think in order to get the right answer.	69	51	38 33
f. This program helped me when I made a mistake.	82	65	38 48
g. I got all the questions right on the first try.	63 54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	88 82	64	46
i. I would rather work on this program by myself than with other classmates.	75 69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	75 73	54	35
k. If I could, I would take this program home to use it.	100 89	68	49
l. I would rather do this program with a classmate than by myself.	64	47	38 30
m. This program was a waste of my time.	24	13 13	2
n. This program is too long.	32	13 19	6
o. I think my friends would enjoy this program.	100 96	77	58
p. I could not do this program without help from my teacher.	42	25 28	14
q. This program was too easy for me.	54	25 35	18
OVERALL STUDENT RATING	92 92	75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: SWEET SHOP Cost: $50

Intended Audience: Grades K-4 Curriculum: Math

Instructional Method: Game and Drill Hardware: Apple

Producer, Author, or Distributor: D. C. Heath

Stated Objectives

Introduction to basic math concepts.

TEACHER Evaluation

Four elementary school teachers examined this program for an average of 15 minutes each. Two teachers indicated prior experience with ten or more programs, but none of the teachers indicated experience with using microcomputer programs with their students in class.

POSITIVE Comments

"...interesting graphics and neat sound effects..."
High grades were given for:
"content of the program is accurate" "relevant practice or testing is consistently provided"

NEGATIVE Comments

"...had trouble reading the numbers..."
Average grades were given for:
"verbal and graphic information is well paced and clear"
"program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 82

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...as supplemental material and extra practice..."

STUDENT Evaluation

Thirty-one first graders examined this program for an average of eight minutes each. All but four indicated no prior experience with microcomputer programs.

All 31 student agreed with the following statements:
"I would like to do this program again."
"I think my friends in class would like to do this program."
"I liked the pictures in this program."

Twenty-six agreed with the following statement:
"I could do this program without help from my teacher."

TITLE: TEASERS FOR TOBBS Cost: $ 40

Intended Audience:Grades 3-10 Curriculum: Logic, Math

Instructional Method: Puzzles and Game Hardware: Apple

Producer, Author, or Distributor: Sunburst Communications

Stated Objectives

An arena for the development of mental arithmetic skills is established through the use of puzzles. Tobbs goes far beyond computation into reversibility. At higher levels, children face one of the most important distinctions in all mathematical thinking: the distinction between must be, can be, and can't be.

TEACHER Evaluation

One media specialist examined this program for 45 minutes. The media specialist had experience with ten or more programs.

POSITIVE Comments

"...the ability to challenge students at their own level..."
High grades were given for:
"program meets its own stated objectives" "suited for its intended grade level" "likely to arouse student interest" "content is accurate" "verbal and graphic information is well paced and clear" "learner responses require thought and are a challenge"

NEGATIVE Comments

"...lack of student management feature..."
Below average grades were given for:
"program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 95

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...useful in small groups as well as for independent study..."

STUDENT Evaluation

Five seventh and eighth graders examined this program for an average of 11 minutes each. Three of the students had experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	68	77	0 56
b. I think this program is too hard.	12	7	0 2
c. The pictures (graphics) were helpful.	96	72	40 48
d. I got lost in this program and didn't know what to do.	28	20 13	0
e. I really had to think in order to get the right answer.	69	51	0 33
f. This program helped me when I made a mistake.	82	65	40 48
g. I got all the questions right on the first try.	80 54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	83	64	20 48
i. I would rather work on this program by myself than with other classmates.	69	53	0 36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	20 35
k. If I could, I would take this program home to use it.	89	69	0 49
l. I would rather do this program with a classmate than by myself.	64	60 47	30
m. This program was a waste of my time.	24	40 13	2
n. This program is too long.	32	40 19	6
o. I think my friends would enjoy this program.	96	77	0 58
p. I could not do this program without help from my teacher.	42	28	0 14
q. This program was too easy for me.	60 54	35	16
OVERALL STUDENT RATING	92	75	33 58

(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: TEMPERATURE GRAPHER Cost: $75

Intended Audience: Grades 9-12 Curriculum: Science

Instructional Method: Simulation Hardware: Apple

Producer, Author, or Distributor: HRM Software

Stated Objectives

This program uses a pair of temperature-sensitive probes connected to the computer through the game-paddle port. After calibrating the probes, students can use one or both to record temperatures in a number of suggested experiments. Some of the energy applications are: solar collector, insulated containers, and cooling liquids.

TEACHER Evaluation

One high school chemistry and physics teacher examined this program for 30 minutes. The teacher had experience with four other microcomputer programs prior to the evaluation.

POSITIVE Comments

High grades were given for:
"program content is accurate" "documents and printed guides give sufficient support" All other areas of the graded criterion received average grades.

NEGATIVE Comments

No negative comments were given, although there was concern over what chemicals might damage the probes.

TEACHER OVERALL RATING (from 0 to 100): 80

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"The main use I would make in chemistry would be for heating and cooling curves."

STUDENT Evaluation

There were no student evaluations completed for this program.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	56
b. I think this program is too hard.	12	7	2
c. The pictures (graphics) were helpful.	96	72	48
d. I got lost in this program and didn't know what to do.	28	12	0
e. I really had to think in order to get the right answer.	69	51	33
f. This program helped me when I made a mistake.	82	65	48
g. I got all the questions right on the first try.	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	35
k. If I could, I would take this program home to use it.	89	69	49
l. I would rather do this program with a classmate than by myself.	64	47	30
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	6
o. I think my friends would enjoy this program.	96	77	58
p. I could not do this program without help from my teacher.	42	28	14
q. This program was too easy for me.	54	35	18
OVERALL STUDENT RATING	92	75	58

(rating given is points 0 to 100)

HIGH AVERAGE LOW

TITLE: TOUCH TYPING TUTOR Cost: $36

Intended Audience: Grades 4-10 Curriculum: Typing

Instructional Method: Drill Hardware: Texas Instrument

Producer, Author, or Distributor: Slosson Ed

Stated Objectives

Designed to help you learn basic typing skills if you are a beginner or to polish your touch-typing skills if you are an experienced typist. The flexible, varied drills in the module provide practice on: single keystrokes and letter combinations, over 40 frequently used word beginnings and endings, sentences, and over 500 frequently used words.

TEACHER Evaluation

One fourth grade teacher spent 60 minutes with this program. The teacher had prior experience with over ten microcomputer programs.

POSITIVE Comments

High grades were given for:
"program meets its objectives" "relevant practice or testing is consistently provided"

NEGATIVE Comments

"too much redundancy for this age (fourth and fifth grade)...I even got frustrated; would be fine for older children who really want to learn to type...not really suited for the classroom...takes too much time."
Below average grades were given for:
"likely to arouse student interest" "verbal and graphic information is well paced and clear" "program provides sufficient review without unnecessary redundancy" "learner responses require thought and are a challenge"

TEACHER OVERALL RATING (from 0 to 100): 50

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

Not for elementary school students.

STUDENT Evaluation

Two fourth graders spent 15 minutes each with this program. Both had prior experience with ten or more microcomputer programs.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line is larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	a. 100	77	55
b. I think this program is too hard.	b. 0	7	2
c. The pictures (graphics) were helpful.	c. 100	72	48
d. I got lost in this program and didn't know what to do.	d. 0	12	0
e. I really had to think in order to get the right answer.	e. 100	51	33
f. This program helped me when I made a mistake.	f. 100	65	48
g. I got all the questions right on the first try.	g. 0	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	h. 100	64	46
i. I would rather work on this program by myself than with other classmates.	i. 100	53	36
j. I would like to be graded by my teacher on the work I did with this program.	j. 100	54	35
k. If I could, I would take this program home to use it.	k. 100	69	49
l. I would rather do this program with a classmate than by myself.	l. 0	47	30
m. This program was a waste of my time.	m. 0	13	2
n. This program is too long.	n. 0	19	6
o. I think my friends would enjoy this program.	o. 100	77	58
p. I could not do this program without help from my teacher.	p. 0	28	14
q. This program was too easy for me.	q. 0	35	16

OVERALL STUDENT RATING

HIGH	AVERAGE	LOW
92	75 (70)	58

(rating given in points 0 to 100)

TITLE: U.S. CONSTITUTION TUTOR Cost: $ 30

Intended Audience: Grades 7-12 Curriculum: Social Sciences

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: Micro Lab

Stated Objectives

The program instructs and tests secondary and adult citizenship students on the U.S. Constitution. Seven sections are given, each with 25 questions. The instruction mode provides multiple-choice questions with explanation of right and wrong answers.

TEACHER Evaluation

Two senior high school government teachers examined this program for one hour each. Both teachers had experience with ten or more programs.

POSITIVE Comments

"...the information is wonderful -- motivating and accurate..."
High grades were given for:
"program is suited for its intended grade level" "program is likely to arouse student interest" "content of the program is accurate" "relevant practice or testing is consistently provided" "learner responses require thought and are a challenge" "program provides a clear evaluation of the student's performance"

NEGATIVE Comments

"...no glaring weaknesses..." "...takes too long to load each question..."

TEACHER OVERALL RATING (from 0 to 100): 95

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"...mainly as a tutorial to be kept in the library and used on an individual basis during non-class time..."
"I think it is excellent...this program would provide basic support to the instruction of skills I require of my students."

STUDENT Evaluation

Eleven high school seniors examined this program for 33 minutes each. Five of the seniors had no prior experience with microcomputer programs; two had experience with one program, one with seven; three with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line is larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	77	56
b. I think this program is too hard.	12	7	2
c. The pictures (graphics) were helpful.	96	72	48
d. I got lost in this program and didn't know what to do.	28	12	0
e. I really had to think in order to get the right answer.	89	51	33
f. This program helped me when I made a mistake.	82	65	48
g. I got all the questions right on the first try.	54	32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64	46
i. I would rather work on this program by myself than with other classmates.	69	53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	54	35
k. If I could, I would take this program home to use it.	89	69	49
l. I would rather do this program with a classmate than by myself.	64	47	30
m. This program was a waste of my time.	24	13	2
n. This program is too long.	32	19	6
o. I think my friends would enjoy this program.	96	77	58
p. I could not do this program without help from my teacher.	42	28	14
q. This program was too easy for me.	54	35	16
OVERALL STUDENT RATING	92	75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: UN REPAS FRANCAIS Cost: $81

Intended Audience: Grades 7-12 Curriculum: Foreign Language, French

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: D. C. Heath

Stated Objectives

To learn the names of some common French food items
To recognize typical French dishes
To become familiar with metric weights and the French monetary system
To practice using the forms of the partitif

TEACHER Evaluation

One high school French teacher examined this program for sixty minutes. The teacher indicated prior experience with five microcomputer programs.

POSITIVE Comments

High grades were given for:
"learner responses require thought and are a challenge" and "feedback is consistent and provides remediation"

NEGATIVE Comments

Average and below average grades were given for:
"program likely to arouse student interest" "verbal and graphic information is well paced and clear" "program is suited for intended grade level"

The teacher also noted, "...many of the pictures can't be identified..."

TEACHER OVERALL RATING (from 0 to 100): 75

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"program too complicated for first year students..."

STUDENT Evaluation

Twenty-five ninth and tenth grade students examined this program for an average of 32 minutes each. A majority of the students had prior experience with fewer than three programs. Five of the students indicated experience with ten or more programs before the evaluation of this program.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line is larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	84 / 77	56
b. I think this program is too hard.	12	16 / 7	2
c. The pictures (graphics) were helpful.	96	88 / 72	48
d. I got lost in this program and didn't know what to do.	28	12	4 / 0
e. I really had to think in order to get the right answer.	69	48 / 51	33
f. This program helped me when I made a mistake.	82	100 / 65	48
g. I got all the questions right on the first try.	54	32	12 / 10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	72 / 64	46
i. I would rather work on this program by myself than with other classmates.	69	48 / 53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	56 / 54	35
k. If I could, I would take this program home to use it.	89	92 / 69	49
l. I would rather do this program with a classmate than by myself.	64	56 / 47	30
m. This program was a waste of my time.	24	13	0 / 2
n. This program is too long.	32	20 / 19	6
o. I think my friends would enjoy this program.	96	84 / 77	58
p. I could not do this program without help from my teacher.	42	20 / 28	14
q. This program was too easy for me.	54	35	16 / 16
OVERALL STUDENT RATING	92	83 / 75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: UNLOCKING THE MAP CODE Cost: $ 111

Intended Audience: Grades 5-9 Curriculum: Geography, Social Studies, Math

Instructional Method: Tutorial Hardware: Apple

Producer, Author, or Distributor: Rand McNally and Marbaugh

Stated Objectives 1)to develop an understanding of the earth, of its surface structure, and of political and cultural characteristics related to its geo-type features; 2) to develop a personal orientation to the immediate environment, to the earth, to space; 3) to develop an understanding of globes and maps as representations of the earth; 4) how maps communicate about the earth, allow us to communicate with each other and how they facilitate our mobility.

TEACHER Evaluation

No teacher evaluations were completed on this program.

POSITIVE Comments

NEGATIVE Comments

TEACHER OVERALL RATING (from 0 to 100):

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

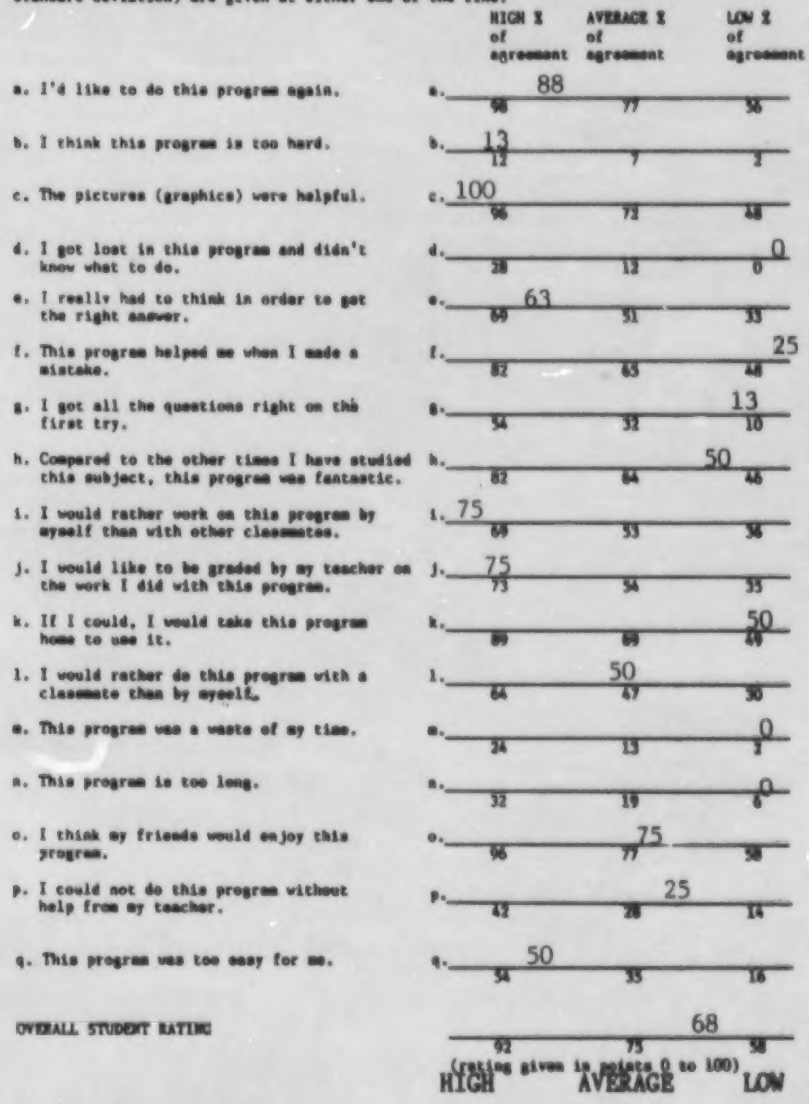
Comments on program utilization

STUDENT Evaluation

Eight sixth graders examined this program for an average of 42 minutes each. Prior experience with microcomputer programs ranged from two programs to seven within this group.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.



(153)

TITLE: VISUAL DISCRIMINATION: SHAPES Cost: $32

Intended Audience: Grades K-4 Curriculum: Logic

Instructional Method: Drill Hardware: Apple

Producer, Author, or Distributor: Aquarius

Stated Objectives

In the first section of this program, the student must determine whether two given shapes are the same or different. Eight levels of difficulty are provided. The second section of the program requires the student to identify the group of shapes that is different. Eight levels are also provided in that section.

TEACHER Evaluation

Two elementary school teachers, one for first grade and the other for fourth grade, spent an average of 53 minutes with this program. Both teachers had prior experience with ten or more programs.

POSITIVE Comments

"...the many levels available..."
High grades were given for the following:
"learner responses require thought and are a challenge"
"content of the program is accurate"

NEGATIVE Comments

"...no variety in the graphics reinforcement, which is also very slow and seemed to lose its appeal to the students after several appearances..."
"...robot response; the response took 15 seconds...waiting became very tiresome..."
The program was given below average grades for:
"verbal and graphic information is will paced and clear"
"clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100): 73

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"I would use this with individual students who needed additional practice... but only as a supplemental exercise."

STUDENT Evaluation

Nine first graders examined the program for ten minutes each. All nine had prior experience with five microcomputer programs. All of the students agreed, "I would like to do this program again." All agreed, "I think my friends in class would like to do this program." All disagreed with the statement, "I could do this program without help from my teacher." All agreed, "I liked the pictures in this program."
Six fourth graders examined this program for 51 minutes each. All of the students had prior experience with ten or more programs.

STUDENT GROUP AGREEMENT PERCENTAGES
Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

Responses from the fourth graders:

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	50	77	96
b. I think this program is too hard.	33	7	12
c. The pictures (graphics) were helpful.	33	72	96
d. I got lost in this program and didn't know what to do.	0	12	28
e. I really had to think in order to get the right answer.	67	51	69
f. This program helped me when I made a mistake.	83	65	82
g. I got all the questions right on the first try.	50	32	54
h. Compared to the other times I have studied this subject, this program was fantastic.	83	64	82
i. I would rather work on this program by myself than with other classmates.	33	53	69
j. I would like to be graded by my teacher on the work I did with this program.	83	54	73
k. If I could, I would take this program home to use it.	83	69	89
l. I would rather do this program with a classmate than by myself.	67	47	64
m. This program was a waste of my time.	0	13	24
n. This program is too long.	17	19	32
o. I think my friends would enjoy this program.	100	77	96
p. I could not do this program without help from my teacher.	50	28	42
q. This program was too easy for me.	83	35	54
OVERALL STUDENT RATING	87	75	92

(rating given in points 0 to 100)
HIGH AVERAGE LOW

TITLE: VISUAL MEMORY Cost: $ 120

Intended Audience: Grades 1-4 Curriculum: Memory skills

Instructional Method: Drill Hardware: Apple, TRS 80

Producer, Author, or Distributor: Aquarius People Materials, Inc. and Careers, Inc.

Stated Objectives

Each program allows the student to select the level of difficulty, and amount of time allowed for memorization. Programs include: "Letters Numbers, Words, Phrases and Sentences," "Figures," "Letters and Numbers," and "Shapes."

TEACHER Evaluation

Three third grade teachers and two elementary school media specialists examined this program series for an average of 59 minutes each. All five indicated experience with ten or more programs.

POSITIVE Comments

"...a needed skill to have the student repeat and drill...a wide variety of levels and programs..."
High grades were given for:
"program provides a clear evaluation of the student's performance"
"learner responses require thought and are a challenge"

NEGATIVE Comments

"...the level of difficulty jumps from very easy to frustration level..." "The program requests the student's name too frequently and never uses the child's name." "Pauses are too long between student response and computer reaction."
Low to failing grades were given for:
"provides sufficient review without unnecessary redundancy"
"relevant practice or testing is consistently provided"

TEACHER OVERALL RATING (from 0 to 100): 71

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

The teachers agreed, "The current noncomputerized materials provide an adequate presentation for my students without the use of this microcomputer program as supplemental material."

STUDENT Evaluation

Seven first graders examined this program for 14 minutes each. None of the students had experience with more than one program prior to looking at this program. All of the first graders agreed, "I would like to do this program again," and "I think my friends would like to do this program." Five of the seven indicated that they could not do this program without help from the teacher and only two agreed, "I like the pictures in this program." Thirty-six third graders examined this program for an average of 14 minutes each. Experience levels were scattered with four indicating experience with one microcomputer program, three with two, three with three, up to two with experience with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line is larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.

Responses of the third graders:

	HIGH % of agreement	AVERAGE % of agreement	LOW % of agreement
a. I'd like to do this program again.	98	83 / 77	56
b. I think this program is too hard.	12	3 / 7	2
c. The pictures (graphics) were helpful.	96	36 / 72	48
d. I got lost in this program and didn't know what to do.	28	6 / 12	0
e. I really had to think in order to get the right answer.	69	44 / 51	33
f. This program helped me when I made a mistake.	82	61 / 65	48
g. I got all the questions right on the first try.	54	28 / 32	10
h. Compared to the other times I have studied this subject, this program was fantastic.	82	64 / 64	46
i. I would rather work on this program by myself than with other classmates.	69	56 / 53	36
j. I would like to be graded by my teacher on the work I did with this program.	73	53 / 54	33
k. If I could, I would take this program home to use it.	89	67 / 69	49
l. I would rather do this program with a classmate than by myself.	64	33 / 47	30
m. This program was a waste of my time.	24	6 / 13	2
n. This program is too long.	32	11 / 19	6
o. I think my friends would enjoy this program.	96	86 / 77	58
p. I could not do this program without help from my teacher.	42	22 / 28	14
q. This program was too easy for me.	54	36 / 35	18
OVERALL STUDENT RATING	92	81 / 75	58

(rating given in points 0 to 100)

HIGH AVERAGE LOW

TITLE: VOLCANOES Cost: $50

Intended Audience: Grades 5-11 Curriculum: Science

Instructional Method: Simulation and Game Hardware: Apple

Producer, Author, or Distributor: Earthware Computer Services & Marbaugh

Stated Objectives

The student will have the opportunity to learn: 1) cooperation in dealing with severe natural hazards, 2) acceptance of ambiguity in observational data, 3) types of volcanoes, 4) volcanic terminology, 5) methods and results of remote sensing surveys.

TEACHER Evaluation

One fifth grade teacher examined this program for two hours. The teacher had prior experience with ten or more programs.

POSITIVE Comments

"...the ideas are excellent, but too difficult for elementary students (and too difficult for me too)."
High grades were given for:
"learner responses require thought and are a challenge"

NEGATIVE Comments

Below average grades were given for:
"likely to arouse student interest"
"verbal and graphic information well paced and clear"
"sufficient review without unnecessary redundancy"

TEACHER OVERALL RATING (from 0 to 100): 10

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

"I would like to use with a large group to enhance my unit on the changing earth...if it could be simplified."

No students evaluated this program.

TITLE: WORD INVASION Cost: $ 44

Intended Audience: Grades 2-6 Curriculum: Grammar

Instructional Method: Drill and game Hardware: Apple, Commodore

Producer, Author, or Distributor: Developmental Learning Materials

Stated Objectives

Provides practice in identifying words representing six parts of speech -- nouns, pronouns, verbs, adjectives, adverbs, and prepositions -- by letting the player control the magic ring of friendly Alien Octopus. Average lesson lasts five minutes. Stores and reports user performance.

TEACHER Evaluation

Two fourth grade teachers evaluated this program after working with it for 20 minutes each. Both teachers indicated experience with ten or more programs (used in the classroom with students) prior to the evaluation.

POSITIVE Comments

The program received exceptionally high grades in all criteria. The teachers especially liked the game approach and the fact that several levels in speed and word difficulty could be established.

NEGATIVE Comments

"It does not correct answer if wrong response is given."

TEACHER OVERALL RATING (from 0 to 100): 95

94	74	54
Exceptionally HIGH	Average	Exceptionally LOW

Comments on program utilization

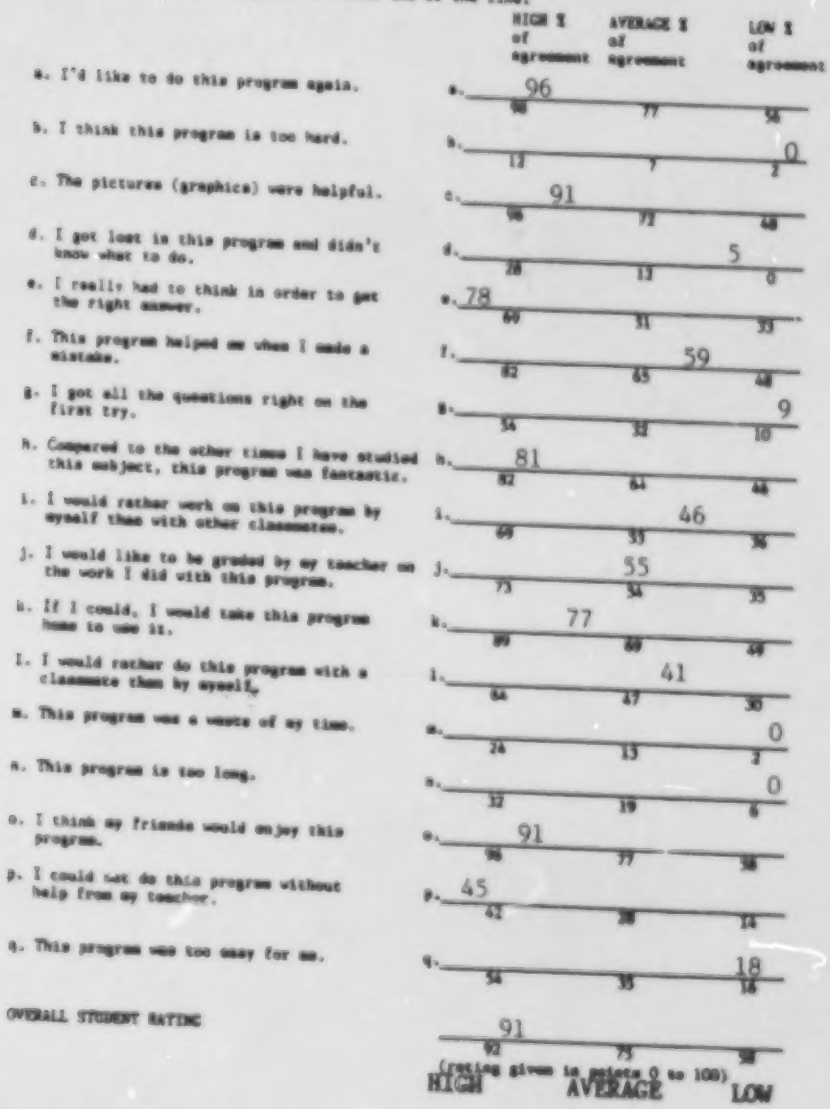
Could be used in a learning center for a wide variety of students as the skill levels can be changed.

STUDENT Evaluation

Twenty-two fourth graders examined this program for an average of ten minutes each. Half of this group had experience with ten or more programs prior to the evaluation. This more experienced group tended to agree as a higher group percentage than the less experienced group in the following areas: "I'd like to do this program again," "The graphics were helpful," "This program helped me when I made a mistake," "Compared to the other times I have studied this subject, this program was fantastic," and (rather a surprise here) "I could not do this program without help from my teacher."

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line in larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.



TITLE: WRITING COMPETENCY Cost: $ 90

Intended Audience: Grades 7-12 Curriculum: Language Arts

Instructional Method: Interactive-Tutorial Hardware: Apple, Commodore, TRS 80

Producer, Author, or Distributor: Educational Activities and Modular Educational Programs

Stated Objectives

The objective of this program is to ensure that the student understands the elements essential to three basic areas of writing composition. Lessons include: "writing an effective body of a business letter," "logical order of a report," and "persuasive writing."

TEACHER Evaluation

Two ninth grade teachers examined this program for an average of 35 minutes each. Both teachers had previous experience with fewer than two programs.

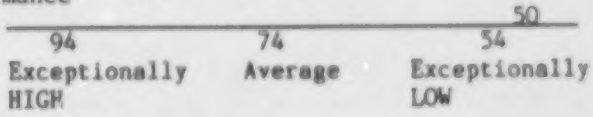
POSITIVE Comments

"The content is accurate and well organized."

NEGATIVE Comments

"...boring..." "...BORING..."
"...too slow..." "...although very complete, students are not excited by it..."
The program received below average ("D" and "F") grades for:
"program suited for intended grade level" "likely to arouse student interest"
"verbal and graphic information is well paced and clear"
Average grades were given for:
"documents and printed guides give sufficient support" "program provides a clear evaluation of the student's performance"

TEACHER OVERALL RATING (from 0 to 100):



Comments on program utilization

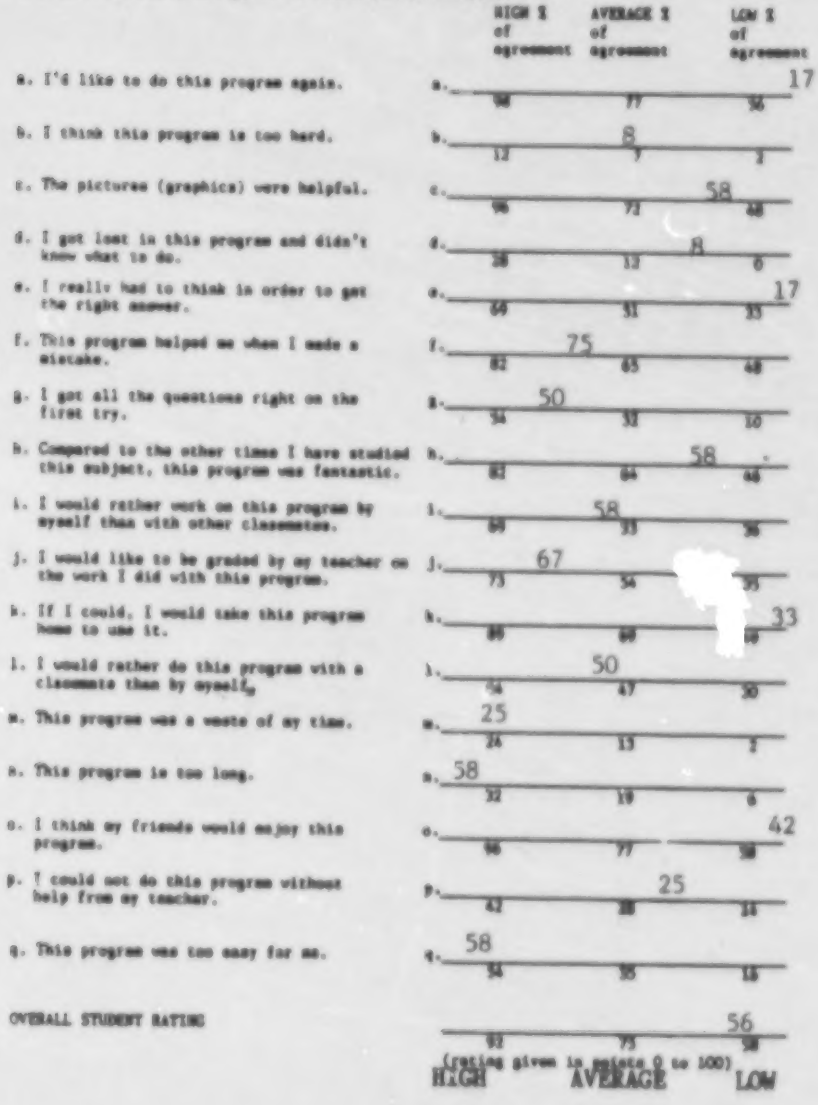
"I wouldn't use it. I want to enhance my class -- make it more exciting and inviting with computers!"
"Grammar Examiner is more useful...Writing Competency 'teaches' but does it like an 89 year old woman."

STUDENT Evaluation

Twelve ninth graders examined this program for an average of 28 minutes each. Five of the students had no previous experience with microcomputer programs; two had prior experience with one program; two with ten or more.

STUDENT GROUP AGREEMENT PERCENTAGES

Students checked agreement with the following statements. The percentage of group agreement given on the line is larger type indicates the percentage of group agreement for this program. The average agreement percentage for all programs field tested is given in the center. Exceptional extremes (one standard deviation) are given at either end of the line.


HIGH % of agreement
AVERAGE % of agreement
LOW % of agreement
a. I'd like to do this program again.
98 77 17
b. I think this program is too hard.
12 8 3
c. The pictures (graphics) were helpful.
96 73 58 48
d. I got lost in this program and didn't know what to do.
28 13 8 0
e. I really had to think in order to get the right answer.
69 51 17
f. This program helped me when I made a mistake.
82 75 65 48
g. I got all the questions right on the first try.
54 50 32 10
h. Compared to the other times I have studied this subject, this program was fantastic.
82 64 58 46
i. I would rather work on this program by myself than with other classmates.
69 58 33 36
j. I would like to be graded by my teacher on the work I did with this program.
73 67 54 35
k. If I could, I would take this program home to use it.
89 69 33
l. I would rather do this program with a classmate than by myself.
54 50 47 30
m. This program was a waste of my time.
24 25 13 2
n. This program is too long.
32 58 19 6
o. I think my friends would enjoy this program.
96 77 42 58
p. I could not do this program without help from my teacher.
42 25 28 14
q. This program was too easy for me.
54 58 35 15
OVERALL STUDENT RATING
93 75 56 58
(rating given in points 0 to 100)
HIGH AVERAGE LOW

A Step by Step Process in Effective Selection of Microcomputer Software

1. Coordinate efforts to identify specific software needs and determine how such courseware will be integrated into your curriculum. Coordination for such need analysis could be directed by the building level media specialist or the district level media director.

   A select group of educators should filter the entire selection and acquisition process, including:

   a. identification of instructional needs
   b. identification of potential software
   c. distribution of software for preview and field testing
   d. gathering teacher and student feedback through structured evaluation forms allowing for comparison of opinions and matching software to curriculum needs
   e. identification of new curricular areas which can be developed because of new skills provided through microcomputer software
   f. make agreements for purchase of software and establish agreements which will allow for district-wide utilization of the software, including multiple copies and networking copies

   For further discussion of this core group for the selection process, see "The Need for Centralized Control of Selection, Evaluation, and Acquisition of Microcomputer Software" in American Secondary Education, Vol. 13, No. 2, 1984, Pp. 10-14.

   As a guide to common terms and basic selection criteria, reference should be made to the Evaluator's Guide for Microcomputer-Based Instructional Packages; available from the International Council for Computers in Education, 135 Education, University of Oregon, Eugene, OR 97403 ($3.50).

2. Identify potential software by contacting neighboring school districts in order to determine what has been successful for them. Examine comprehensive guides to software on the market and attend conferences which allow direct contact with vendors of educational software.

   Some of the major software guides include:

   The Educational Software Selector 1984 and 1985 from the EPIE Institute and Teachers College Press. The 1985 volume is available for $59.95 plus $5.50 shipping when ordered directly from EPIE, TESS 85, Dept T-9, Box 839, Water Mill, NY 11976. This is an extremely comprehensive but non-evaluative guide.

   As a guide to help you determine those programs from the thousands out there which are worth your time to even preview, use the following:

The Educational Software Preview Guide: available either free or at a minimal charge for shipping, from the California TECC Software Library and Clearinghouse, SMERC Library and Microcomputer Center, San Mateo County Office of Education, 333 Main Street, Redwood City, CA 94063; or contact the Indiana Clearinghouse for Computer Education, 902 West New York, Indianapolis, IN 46223, phone (317) 264-8001. This guide is designed to tell you quickly by title and by subject those programs which have received positive evaluations from 35 test sites around the United States, one of which as been the Lilly Project.

The Digest of Software Reviews: published quarterly and available for $57.95 a year, 301 W. Mesa, Fresno, CA 93704. Also available is the Micro-Courseware PRO/FILE from the EPIE Institute, Box 839, Water Mill, NY 11976 and Software Reports; the guide to evaluated educational software, Trade Service Publications, 10996 Torreyana Road, San Diego, CA 92121. These last three review sources, as well as a new guide coming out from the Facts-on-File people, are all expensive. Consider subscribing to one and finding neighboring schools which will subscribe to others. When you get together to share results of your own previewing, share the guides too.

3. Preview potentially useful software. Both teachers and students should be involved. The EPIE Institute has given the best reason for such previewing:

> Previewing any courseware you are considering buying is an absolute necessity. The traditional previewing of instructional materials that has been done over the years by media and library personnel simply isn't enough when it comes to microcomputer courseware. Why? Because courseware, unlike traditional materials, is interactive. Students respond directly to the courseware; there is little teacher mediation to compensate for poorly designed materials.

4. Consider using the teacher and student evaluation forms developed through the Lilly Linkage Project and tested at nine Indiana school corporations. This will allow for a systematic and consistant judgment to be placed on each piece of software. The information generated from these forms allows you to gather data and make comparisons.

   Use these forms, however, with the following limitations in mind:

   a. Even the previewing of the materials by both students and teachers does not tell you exactly how effective the material will be in your classroom. However, local evaluations will give you some additional evidence which may be more relevant than those reviews published in the professional literature.
   b. All evaluation approaches are based on the instructional technology currently available. Software and hardware may change rapidly. Specifically, software may become even more "interactive" than we presently know it and new questions may need to be considered beyond those raised on the current evaluation forms.
   c. The Lilly Linkage evaluation forms are based on instructional microcomputer software programs. Other questions should be considered for evaluation of word processing and information management programs.

d. The Lilly Linkage forms provide useful results if several teachers are involved in the evaluation process and a group of students are involved (at least ten students, and as many as thirty is recommended). The student evaluation forms are designed for students in grades 3 to 12. To involve so many people with the structure of the regular school day causes a great many time limitations. Therefore, previewing should be planned before the program is obtained on loan. You will need all of the thirty days usually allowed for previewing, and in most cases, you will need more time. Plan to work for extensions of previewing time and assure the producer that your intentions are good; you have no desire to copy his program.

e. You will always need to consider additional factors which cannot be addressed in an evaluation form: Is this program special or unique? Does it fill a void in the collection? Does it fill a void in the curriculum? Is this program over-priced? Can we get along just fine with traditional materials without adding a micro program? Are there better programs on this topic forthcoming?

   Such questions can only be answered by keeping in touch with the review literature and, most important, keeping in touch with fellow professionals who are also seeking the best possible materials.

And this brings us to the final and most important step:

5. Share your evaluation findings, both results of local previewing and how the software is used in the classroom, with neighboring school districts. Host and attend "Microcomputer Software Fairs." Add to such fairs the opportunity to display materials other than software which have been successful at your school. Capitalize on in-service days for such an event, or exchange evaluation summaries by mail. Your input will be appreciated.

This evaluation form was developed in August of 1983 for the field testing of microcomputer software in Indiana public schools.

TEACHER Microcomputer Software Evaluation Form 1983-1985 Lilly Endowment Grant

Northwest Consolidated Schools of Fairland & School of Library and Info Science IU

PROGRAM TITLE: _____ Date: _____

Your teaching subject area and grade level: _____

1. How many different educational microcomputer programs have you examined prior to this program? (circle) 1 2 3 4 5 6 7 8 9 10+

   How many programs have you used with your classes prior to the evaluation of this program? (circle) 1 2 3 4 5 6 7 8 9 10+

2. Did you work through the entire program? (circle) YES NO
   If yes: how long did it take you to complete the program? _____minutes
   If no: how long did you work with it? _____minutes
   Why did you stop before finishing?

3. GRADING THE PROGRAM.

	High	(circle one)			Low
a. This program meets its own stated objectives	A	B	C	D	F
b. This program is suited for its intended grade level	A	B	C	D	F
c. This program is likely to arouse student interest	A	B	C	D	F
d. The content of this program is accurate	A	B	C	D	F
e. Verbal and graphic information is well paced and clear	A	B	C	D	F
f. This program provides sufficient review without unnecessary redundancy	A	B	C	D	F
g. Relevant practice or testing is consistently provided	A	B	C	D	F
h. Feedback (knowledge of correct response) is consistent and provides remediation	A	B	C	D	F
i. Learner responses require "thought" and are a "challenge"	A	B	C	D	F
j. The instructional approach used (tutorial, drill & practice, simulation, game) suits the program's content	A	B	C	D	F
k. Documents and printed guides give sufficient support	A	B	C	D	F
l. The program provides a clear evaluation of the student's performance	A	B	C	D	F

Please write any additional comments concerning any areas of section #3 on the back of this sheet. Identify your comments by noting before each #3 and the letter of the grading statement to which you are referring.

4. State a major STRENGTH of this microcomputer program.

   State a major WEAKNESS of this microcomputer program.

5. Describe how you would utilize this program with your students. If not, write NO. (Continue your description on the back of this sheet if necessary. Consider specific topic areas currently in your class and any relationship this program would have to that topic; consider large group or independent study usage; consider where the program fits in your normal teaching plan; and consider additional materials that would make this program even more useful.)

6. Describe areas of your school's curriculum which could utilize this program other than your own classes. If none, write NO.

7. Have you worked with another microcomputer program similar in content (with similar learning objectives) ? (circle) YES NO

   If yes: give the title:

   Of the two programs, which do you feel has more educational value for your class? State reasons.

8. Circle the letter by the statement which best reflects your feeling toward this microcomputer program in comparison to materials you may currently have access to for enhancing your classroom instruction:

   A. The current noncomputerized materials provide an adequate presentation for my students without the use of this microcomputer program as SUPPLEMENTAL material.
   B. This microcomputer program supports and enhances my current materials and would provide BASIC support to the instruction of the skills I require of my students.
   C. This microcomputer program introduces a new content area and additional skills not currently required of my students and I would welcome it as an ESSENTIAL new part of the instructional unit.

9. Overall, on a scale of "0" (lowest) to "100" (highest), I rate this microcomputer program as : _____.

Original form on 8½ x 14

(9911)

TEACHER microcomputer software evaluation

YOUR NAME : _____ SCHOOL : _____

PROGRAM TITLE : _____ Date : _____
If there is more than one program on the disk or tape, complete a form for each new program.

Your teaching subject area and grade level : _____

If you have never worked with an educational microcomputer program before, it will be worth your time to examine at least two other programs before completing a written evaluation on the program you are previewing or field testing. Simply ask your school media specialist for two other programs, hopefully relevant to the same grade level and subject area of the program you will evaluate, and spend about 15 minutes examining each program. Also examine the study guides or other printed materials which come with each program.

To complete a written evaluation of a microcomputer program, plan to give at least 40 minutes to the examination of the program itself and about 20 minutes to the completion of this form. As you examine the program, consider not only your expectations as a teacher, but also how students might approach the program. Test for the program's response to incorrect answers as well as correct ones. Does the program give guidance and assistance?

Before you start any program read the supporting documentation, study guide or directions provided. Before you start the program, check one of the following:

a._____I am evaluating this program for possible utilization in a class I am teaching.

b._____I am evaluating this program to provide an additional teacher's (or adult's) opinion, but the content of the program does not relate to any course I currently teach.

Before you start the program, read the following statements. After you have progressed into the program, return to these statements to give your response.

c._____I stopped working with this program before the minimum of 40 minutes because it does not interest me.
(if you checked this statement do not complete the rest of the form)

d._____I stopped working with this program before the minimum of 40 minutes because its drill and practice format can be tested in only 15 to 20 minutes, and I feel most of the possible options of the program can be seen within this shorter time limit.
(if you checked this statement and you feel ready to complete this form, proceed)

e._____I have examined the program for at least 40 minutes; or if more than 40, how long? _____.
(if you checked this statement and you feel ready to complete this form, proceed)

GRADING THE PROGRAM

I. For each of the following statements, grade the program.

		High		(circle one)		Low	
1. This program meets its own stated objectives.	1.	A	B	C	D	F	Doesn't Apply
2. This program is suited for its intended grade level.	2.	A	B	C	D	F	DA
3. This program is likely to arouse student interest.	3.	A	B	C	D	F	DA
4. The content of this program is accurate.	4.	A	B	C	D	F	DA
5. Verbal information is well paced and clear.	5.	A	B	C	D	F	DA
6. Graphics are well paced and clear.	6.	A	B	C	D	F	DA
7. This program provides sufficient review without unnecessary redundancy.	7.	A	B	C	D	F	DA
8. Relevant practice and clear examples are provided.	8.	A	B	C	D	F	DA
9. Feedback (knowledge of correct response) is consistent and provides remediation.	9.	A	B	C	D	F	DA
10. Learner responses require "thought" and are a "challenge."	10.	A	B	C	D	F	DA
11. The instructional approach used (tutorial, drill & practice, simulation or game) suits the content.	11.	A	B	C	D	F	DA
12. Documents or printed guides give sufficient support.	12.	A	B	C	D	F	DA
13. The program provides clear evaluation of the student's performance.	13.	A	B	C	D	F	DA

(over)

II. Check any of the following phrases or terms which represent major STRENGTHS of this program. _____"none"
_____"motivating" _____"challenging" _____"excellent graphics" _____"excellent vocabulary"
_____"provides good drill and review" _____"easy and fun" _____"allows for a variety of skill levels"
_____"clear directions" _____"clear record of student's performance" _____"accurate content"
_____"content relevant to curriculum" _____"content relevant to 'real world situations'"
_____"students interact as a team to work the program" _____"supports individualized instruction"
_____"can reenter program at various points without reviewing previous or unwanted programming"
_____"other" :

III. Check any of the following phrases or terms which represent major WEAKNESSES of this program. _____"none"
_____"poor, unclear directions" _____"content not accurate" _____"boring" _____"poor graphics"
_____"pacing is very slow" _____"no control over revision of content" _____"too difficult for intended age"
_____"not really very challenging" _____"unable to control skill level" _____"provides drill only"
_____"forced to repeat previously completed program portions when reentering" _____"teacher must restart"
_____"does not match or support curriculum" _____"fails to give feedback for clear remediation"
_____"other" :

IV. What specific unit of study would this program support? How would the program be used? _____"none"

V. List specific skills which would be supported by this program. _____"none"

VI. Have you examined other microcomputer programs similar in content (with similar objectives)? YES NO
If yes, give the title:
Of these programs, which do you feel has more educational value for your students? Note reasons.

VII. Do you want the media specialist to request preview of additional programs which cover the same objectives and purpose as this program you are evaluating? YES NO
If yes, can you suggest titles? Can you suggest materials other than microcomputer programs?

VIII. Place a check to the left of any of the following statements with which you agree regarding this program.
_____f. The current noncomputerized materials provide an adequate presentation for my students without the use of this microcomputer program.
_____g. This microcomputer program supports and enhances my current instructional materials and would provide enhancement to instruction of the skills I require of my students.
_____h. This microcomputer program introduces a new content area and additional skills not currently required of my students. It is essential to have this program to support these new skills in the classroom.

IX. Place a check to the left of any phrase which reflects your opinion concerning purchase of this program.
_____"highly recommend purchase" _____"recommend purchase" _____"recommend purchase with reservations"
_____"do not purchase" _____"purchase only certain portions: _____"
_____"recommend purchase of more than one copy" _____"recommend purchase of agreement to duplicate"
_____"don't know; need additional information or opinions before I can decide on purchase"
_____"would like to see other programs or consider other materials before I decide on purchase"
The following person should also evaluate this program:

X. Overall, on a scale of "0" (lowest) to "100" (highest), I rate this microcomputer program as _____.

This evaluation form was developed and tested by school corporations in Indiana from 1983-85, and was supported by funds made possible from the Lilly Endowment Inc. For more information, contact Daniel Callison, School of Library and Information Science, Indiana University, Bloomington, IN 47405; or Gloria Haycock, Northwestern Consolidated School District of Shelby County, RR 1, Fairland, IN 46126.

A Methodology for TEACHER Evaluation of Microcomputer Software

1. Teachers involved should match the intended grade level and subject area for which the program is designed. Additional impressions and evaluations may be sought from other teachers who are not responsible for instruction in the relevant subject area, but their opinions should be considered on a separate basis.

2. Teachers should have the opportunity to examine other microcomputer software programs prior to the evaluation of the one being considered for purchase. These programs do not have to be similar in content or instructional approach, but the teacher needs some idea of the interactive aspects of microcomputer software to help him or her make judgments.

   It is worthwhile to give the teacher the opportunity to read the Evaluator's Guide for Microcomputer-Based Instructional Packages. This publication is available from the International Council for Computers in Education, 135 Education, University of Oregon, Eugene, OR 97403 ($2.50).

3. It may be sufficient for one teacher to examine the program. However, time should be allowed for second and third opinions to be gathered. The school media specialist should play an active role in evaluating the software and generate his or her impression through the evaluation process. The media specialist should take the interactive role of organization and summarization of the evaluations.

   Each teacher should have the opportunity to invest at least one hour for both examination of the program and completion of the form. Some teachers may want more time, and in some cases the teacher may want to examine the program over a period of several days.

4. If a teacher stops the program before a minimal time investment of forty minutes and feels the program does not interest him or her, such feedback should be recorded. However, in order for a teacher to complete the evaluation form and give an effective evaluation, drill and practice programs should receive at least 15 minutes of attention (plus examination of the study guide). Simulations, games and tutorials should receive at least forty minutes of examination time plus a complete reading of the support documentation.

5. Teachers may examine programs alone or with peers. It is important, however, that each teacher has the opportunity to operate the program. Teachers may want to compare impressions, but should complete separate evaluation forms.

   It is important that an evaluation form be completed for each program examined. There are many software packages available which contain a series of programs or a menu of programs on one disk. The form is not designed to evaluate a series of programs unless the programs are very closely related in content or instructional approach. If the program has the option allowing for alteration of speed or difficulty, the teacher should examine the program at these various levels.

6. In some cases, depending on the demands of the microcomputer program, the teacher may invest more than forty minutes in the examination of the program. A record of the time invested should be kept as it indicates not only the time to complete the program, but teachers tend to spend more time with those programs for which they see some merit in future use in the classroom.

   In the field test, a teacher seldom spent over forty minutes unless he or she became interested enough in the program's content and presentation structure to explore all of the options offered.

   If more than one teacher examines the program completely and they both represent the same grade level and subject area, their time investment and evaluations should be combined and averaged.

7. The 13 statements for grading the program are given on the bottom half of the front of the teacher evaluation form. The average grade given for these statements is given on the next page. These average reactions are shown here as a guide for determining the significance of the grades given by teachers on future evaluations.

   For some criteria statements, an exceptionally high grade may be on the "B" level and not need to reach the "A" level for the teacher to give the program an exceptionally high rating. "Documents or printed guides give sufficient support," for example, often received a "B" or a "C" grade while the program was rated overall as an exceptionally good program and was a program the teacher highly recommended for purchase. On the other hand, seldom did the statement "The content of this program is accurate" receive below an "A" and also receive an exceptionally high rating.

   The full meaning of these grades can only be established over time and in comparison with the evaluation of other programs locally by teachers. As a starting point for comparison, it should be understood that the statements given on the following page should receive the average grade listed or above in order to indicate a positive impression on the part of the teacher.

GRADING THE PROGRAM
Grades and Overall Ratings by TEACHERS

Statement	Average Grade	Average Grade Exceptionally High Rating	Average Grade Exceptionally Low Rating
1. This program meets its own stated objectives.	B	A	C
2. This program is suited for its intended grade level.	B	A	C
3. This program is likely to arouse student interest.	B	A	C
4. The content of this program is accurate.	B	A	B
5. Verbal information is well paced and clear.	B	B	C
6. Graphics are well paced and clear.	B	B	C
7. This program provides sufficient review without unnecessary redundancy.	B	B	C
8. Relevant practice and clear examples are given.	B	A	C
9. Feedback (knowledge of correct response) is consistent and provides remediation.	B	B	C
10. Learner responses require "thought" and are a "challenge."	B	A	C
11. The instructional approach used (tutorial, drill & practice, simulation or game) suits the content.	B	A	C
12. Documents or printed guides give sufficient support.	B	B	C
13. The program provides clear evaluation of the student's performance.	B	B	C
Overall Rating	74	94	54

8. In parts II and III, the teacher is given the common strengths and weaknesses noted for most microcomputer programs. The teacher may check agreement with any of the terms or phrases which describe either a strength or weakness. In some cases, the teacher may check "none" to indicate no major strengths or no major weaknesses. In other cases, the teacher may use the space provided after "other" to describe strenghs or weaknesses not given.

9. Part IV allows the teacher to describe how the program would be used to support a specific instructional unit. Generally, teachers will respond with such terms as "for reward," "for remediation," or "for independent study." In other cases, however, teachers will note specific units within their current class for which the program would be useful. If the teacher feels that the program would not be useful, he or she should simply check "none."

10. Part V continues the opportunity for the teacher to note specifically how the program relates to the curriculum. In this case, the teacher may list specific skills which may or may not be required within the current curriculum. The teacher may list new skills resulting from the program, but are skills not in the curriculum. The question for discussion then becomes an issue of accepting such skills into the curriculum or not. If no skills can be determined, the teacher can simply check "none."

11. A comparison with other microcomputer programs is requested in part VI. In the field test project, about one evaluation form in ten provided a record of such comparisons. This percentage should increase over the years as teachers become aware of more and more programs. Such comparisons assist in the selection of one program from several being considered and will assist in situations where a currently owned program should be removed from the curriculum or retained.

12. Part VII is provided to formalize communication to the school media specialist concerning the desire to preview other programs on the same content or to request other materials. In some cases, this may involve materials other than microcomputer software. The teacher may be saying, "the program is good, but there must be something better out there." Or it may be that this program is sufficient for one instructional area or one skill, but there is still a need for additional programs in order to cover the entire instructional unit.

13. Part VIII forces the teacher to make a judgment on the software in terms of how important the program is to current skills being taught or new skills which only the microcomputer can effectively introduce.

14. Recommendations for purchase may involve several options. In part IX these options include levels for "recommendation to purchase" and other options unique to microcomputer software: "purchase only certain parts of this program," "obtain duplication agreements" so that multiple copies can be used in the district. The need for examination of other programs or other opinions can be expressed here too.

15. The teacher is requested (as is the student) to make an overall judgment by rating the program from 0 to 100. If more than one teacher completes an evaluation form, this rating should be averaged to reflect a group rating from teachers responsible for the same grade levels and subject areas.

    Results from the field test project indicate that the average rating for a program is "74." An exceptionally high rating will be "94" or higher and an exceptionally low rating is "54" or lower.

16. Either the teacher or student evaluation form may be duplicated as many times as needed for use in evaluations of microcomputer software. You are encouraged to share your findings with other educators and to make suggestions concerning the evaluation process. Direct your comments to Daniel Callison, School of Library and Information Science, Indiana University, Bloomington, IN 47401.

17. Always remember that the teacher opinions reflected from this form represent one factor in the selection process. Although the teacher reaction is one of the major factors, other areas to be considered include student reaction, cost, materials already owned, what effect does the material have on the current curriculum and possible development of future higher quality software.

NOTE: If there is more than one program on the disk or tape, please complete one evaluation sheet for each program. Give the title of the program series and the individual program title in the space below.

STUDENT (3-12) Microcomputer Software Evaluation Form 1983-1985 Lilly Endowment Grant

PROGRAM TITLE: _____ Date: _____

The student's current grade level _____ and age _____

1. How many different educational microcomputer programs have you worked with prior to this program? (circle) 1 2 3 4 5 6 7 8 9 10+ or NONE

2. Did you work through the entire program? (circle) YES NO

If yes: how long did it take you to complete the program? _____minutes

If no: how long did you work with it? _____minutes

Why did you stop before finishing the program? (circle one of the following):

TOO HARD GOT BORED HAD TO LEAVE DID IT BEFORE DIDN'T WORK

or OTHER:

3. After each statement, check (✓) if your agree or disagree:

		AGREE (yes)	DISAGREE (no)
a. I'd like to do this program again.	a.	_____	_____
b. I think this program is too hard.	b.	_____	_____
c. The pictures (graphics) were helpful.	c.	_____	_____
d. I got lost in this program and didn't know what to do.	d.	_____	_____
e. I really had to think in order to get the right answer.	e.	_____	_____
f. This program helped me when I made a mistake.	f.	_____	_____
g. I got all the questions right on the first try.	g.	_____	_____
h. Compared to the other times I have studied this subject, this program was fantastic	h.	_____	_____
i. I would rather work on this program by myself than with other classmates.	i.	_____	_____
j. I would like to be graded by my teacher on the work I did with this program.	j.	_____	_____
k. If I could, I would take this program home to use it.	k.	_____	_____
l. I would rather do this program with a classmate than by myself.	l.	_____	_____
m. This program was a waste of my time.	m.	_____	_____
n. This program is too long.	n.	_____	_____
o. I think my friends would enjoy this program.	o.	_____	_____
p. I could not do this program without help from my teacher.	p.	_____	_____
q. This program was too easy for me.	q.	_____	_____

Northwest Consolidated Schools of Fairland & School of Library and Info Science IU

4. Using written statements, pencil drawings, a graph, or any other written means of expression, show below two major ideas you remember from the program. Use a common #2 lead pencil to give your response.

Major idea remembered # one:

_____

_____

Major idea remembered # two:

_____

_____

(174)

5. Overall, on a scale of "0" (lowest) to "100" (highest), I rate this microcomputer program as : _____.

This form was developed in August, 1983 for the purpose of field testing educational microcomputer software in Indiana public schools.

STUDENT microcomputer software evaluation

PROGRAM TITLE : _____ Date : _____

If there is more than one program on the disk or tape, complete a form for each new program.

Student's current grade level : _____ and age : _____

If you have never worked with an educational microcomputer program before, take some time before evaluating this program to examine at least two other programs. Have a friend who has experience with microcomputer programs help you get started. After you have spent ten to twenty minutes with each of these first two programs (in order to gain some experience with the equipment) you may move on to the evaluation of the program given to you and the completion of this form.

After you have spent at least 30 minutes working with the program given to you to evaluate, you may stop the program and read through the questions given below. If you feel that you have completed the program, you may respond to the questions. You may, however, take more time to examine the program if your teacher gives you the opportunity. If you have to leave the program before spending at least 30 minutes with it, do not complete the form but wait until you can spend more time with the program.
Read statements a,b,and c before you begin your program.
Check (✓) one of the following statements:

a._____ I stopped working with this program before the minimum 30 minutes because it is too difficult.
(if you checked this statement do not complete the rest of the form)
b._____ I stopped working with this program before the minimum 30 minutes because I got bored.
(if you checked this statement do not complete the rest of the form)
c._____ I have examined the program for at least 30 minutes; or if more than 30, how long? _____.
(if you checked this statement and you feel ready to complete this form, proceed)

For each of the following statements with which you AGREE, place a check (✓) in front of it:

I. 1._____ I'd like to do this program again.

2._____ The graphics were helpful.

3._____ I got lost in this program and didn't know what to do.

4._____ I really had to think in order to get the right answer.

5._____ This program helped me when I made a mistake.

6._____ I got all of the answers right on the first try.

7._____ Compared to the other times I have studied this subject, this program was fantastic.

8._____ I would rather do this program with a classmate than by myself.

9._____ I would like to be graded by my teacher on the work I did with this program.

10._____ If I could, I would take this program home to use it.

11._____ This program was a waste of my time.

12._____ This program lasts too long.

13._____ I think my friends would enjoy this program.

14._____ I could not do this program without help from my teacher.

15._____ This program was too easy for me.

II. On a scale of "0" (lowest) to "100" (highest), I rate this microcomputer program as

_____

(over)

III. Using a statement, drawing, a graph, or any other written means of expression, give below an idea or fact you remember from the program.

IV. What did you LIKE most about the program?

V. What did you DISLIKE most about the program?

******

This evaluation form was developed and tested by school corporations in Indiana from 1983-85, and was supported by funds made possible from the Lilly Endowment Inc. For more information contact Daniel Callison, School of Library and Information Science, Indiana University, Bloomington, IN 47405; or Gloria Haycock, Northwestern Consolidated School District of Shelby County, RR 1, Fairland, IN 46126.

A Methodology for STUDENT Evaluation of Microcomputer Software

1. Students involved should match the intended grade level or ability level of the software.

2. Students should have the opportunity to experience other software programs prior to the evaluation of the program being considered for purchase. These programs do not have to be similar in content or instructional approach, but the student needs to have some idea of the interactive aspects of microcomputer software to help him or her make judgments.

3. Allow enough time so that a group of students can evaluate the program and their opinions can be combined in terms of a group response. Most of the programs on the market today require at least thirty minutes of user exposure to the program's operation before impressions can be gathered for completing the evaluation form.

4. Students may examine programs alone or with peers. It seems to be an efficient use of time and effort to encourage students to work a program through with a companion. This peer support may be especially important for those who have not experienced many programs prior to the evaluaton process. If students work in teams, both members should "touch the keyboard and respond to the program" as much as possible. One strong method, if time permits, is for one student to work the program while the other observes and after completion of the program, the two students exchange tasks. The student should never remain strickly an observer prior to completing the evaluation form.

5. Teachers should not share their personal opinion or the results of their evaluation with the students before the students have had the opportunity to complete a form. Teachers may want to "compare notes" with the students after the students have completed the evaluation process.

6. It is important that an evaluation form be completed for each program examined. There are many software packages available which contain a series of programs or a menu of programs on one disk. The form is not designed to evaluate a series of programs unless the programs are very closely related in content and instructional approach. If the program has the option allowing for alteration of speed or difficulty, the level at which the student examined the program should be noted by the title.

7. Tabulation of the student evaluation forms will generate a percentage on statements 1 to 15 in part I. This will represent the agreement with these statements as a group. The percentage is determined by dividing the total number of checks for the statement by the number of students who completed the evaluation form. Thus, eight checks for agreement to statement number one out of ten students examining the programs results in an 80% group agreement score.

8. The total number of students who evaluate the program will depend upon the demands of the program, time allowed by the teacher for the evaluation, and the degree of commitment in allowing for student input. A group of five to 15 students will generate some information, but a group of up to thirty will give a more firm impression of student opinion.

9. Once the completed forms have been gathered, they should be separated to reflect groups of students from the same grade level (or ability level). It may be possible to combine two grade levels if it is felt that there are similar skills expected and measured at both grades, but it is unwise to combine more than two. Seventh and 8th graders might go together, but probably not 5th, 6th, 7th and 10th.

10. Separate the evaluation forms which indicate that the student was bored or did not wish to complete the program evaluation because it was too difficult. If these uncompleted forms represent over a third of the student evaluation population, one should question the effectiveness of the software for the age group conducting the evaluation.

    For the completed forms, talley the following areas:

    a. Determine the average amount of time given to the program by the students. If they voluntarily invested over thirty minutes in the program, this is an indication that the program kept their interest and probably has their approval.

    b. Test the degree of that approval by determining the percentage of agreement from the student group for criteria statements 1 to 15 given in part I. You may determine exceptionally high or exceptionally low agreement percentages from the table given on the next page.

For example, we found through the field test experience that a high percentage of students want to do the program again in almost any given situation. An exceptionally high percentage would need to reflect 95% agreement or more. The average percentage for this statement involving a group of 18 or more students was 77%. Your overall interpretation of the student evaluations may not center on this or any other one statement, but it is not an acceptable conclusion when 60% of the students agree with statement one that there is a "high" percentage of students wishing to continue use of the program. Relative to other programs and other evaluations, this 60% agreement is below average and a weak indication of a great desire on the part of the group of students as a whole to use the program again.

STUDENT GROUP AGREEMENT PERCENTAGES
Involving a group of 5 to 17 students.

Statement	Average %	Exceptionally High %	Exceptionally Low %
1. I'd like to do this program again.	74	95	49
2. The graphics were helpful.	68	95	41
3. I got lost in this program and didn't know what to do.	13	29	5
4. I really had to think in order to get the right answer.	48	73	23
5. This program helped me when I made a mistake.	64	88	40
6. I got all of the answers right on the first try.	34	60	8
7. Compared to the other times I have studied this subject, this program was fantastic.	62	87	37
8. I would rather do this program with a classmate than by myself.	46	66	26
9. I would like to be graded by my teacher on the work I did with this program.	57	80	34
10. If I could, I would take this program home to use it.	65	89	42
11. This program was a waste of my time.	15	33	5
12. This program lasts too long.	17	32	5
13. I think my friends would enjoy this program.	74	95	52
14. I could not do this program without help from my teacher.	29	47	11
15. This program was too easy for me.	33	55	11
Overall Rating	75	92	58

STUDENT GROUP AGREEMENT PERCENTAGES
Involving a group of 18 or more students.

Statement	Average %	Exceptionally High %	Exceptionally Low %
1. I'd like to do this program again.	77	95	56
2. The graphics were helpful.	72	95	48
3. I got lost in this program and didn't know what to do.	12	24	5
4. I really had to think in order to get the right answer.	51	69	33
5. This program helped me when I made a mistake.	65	82	48
6. I got all of the answers right on the first try.	32	54	10
7. Compared to the other times I have studied this subject, this program was fantastic.	64	82	46
8. I would rather do this program with a classmate than by myself.	47	64	30
9. I would like to be graded by my teacher on the work I did with this program.	54	73	35
10. If I could, I would take this program home to use it.	69	89	49
11. This program was a waste of my time.	13	24	5
12. This program lasts too long.	19	32	6
13. I think my friends would enjoy this program.	77	95	58
14. I could not do this program without help from my teacher.	28	42	14
15. This program was too easy for me.	35	54	16
Overall Rating	75	92	58

11. Determine the overall average rating of the program by first removing the one lowest score (or one of the lowest) and, second, removing the one highest score (or one of the highest). Take the remaining evaluation forms and compute the average rating from the students.

    From the programs evaluated in the field test, the average rating given by students was "75." An exceptionally high rating would need to be "92" or higher. An exceptionally low rating would need to be "58" or lower.

12. On the back of the student evaluation form allow students the opportunity to verbalize or make visual in some manner their own impression of the value of the program. Most often these statements and drawings will represent some program graphic, command, or visual reward received from the computer. However, as the evalautions are completed in the higher grade levels (9th to 12th) more and more facts and concepts appear. If over a third of the student population from the senior high school group describes concepts learned from the program, they have been concentrating on the program's content and the software may be communicating an educational message which can be measured without further use of the program or additional input from the teacher.

    Receiving little information for parts III, IV and V should not indicate a weak program. Students may not know what to say. They may not know that they have learned something. Or they may write something they already knew but the program has reminded them and it may seem to the student to be the sort of fact or idea they would be expected to report.

    These portions (III, IV and V) have not been tested extensively. It may be that as a student evaluates more and more programs he or she will become more sophisticated in reporting likes and dislikes. The back side of the form should serve as a beginning for the student to practice this process involving written critical opinion.

13. Either the teacher or student evaluation form may be duplicated as many times as needed for use in evaluation of microcomputer software. You are encouraged to share your findings with other educators and to make suggestions concerning the evaluation process. Direct your comments to Daniel Callison, School of Library and Information Science, Indiana University, Bloomington, IN 47401.

14. Always remember that the student opinions reflected from this form is one factor to consider in selection of microcomputer software. Additional factors include need, materials already owned and used, cost, and possible development of future higher quality software.

QUESTIONS AND ANSWERS FROM AN ANALYSIS OF THE DATA

The questions posed and responses given below are limited to impressions gained through the analysis of the evaluation forms from 291 completed forms from teachers and 2308 completed forms from students. No observation was made of either the teachers or students as they evaluated the programs, nor were any interviews of any of the evaluators conducted. The evidence reported is a reflection of the information from the forms only. Further research is necessary to draw conclusive statements.

1. How many microcomputer programs had the evaluator experienced prior to field testing a program for this project?

29% of the student forms were completed by evaluators who had prior experience with ten or more programs.
17% of the student forms were completed by evaluators who had never experienced a microcomputer program prior to the field test.
30% had experienced one or zero.
40% had experienced two or fewer.

60% of the teacher forms were completed by evaluators who had prior experience with ten or more programs.
6% of the teacher forms were completed by evaluators who had never experienced a microcomputer program prior to the field test.
41% of the teacher forms were completed by evaluators who had prior experience in using ten or more programs in the classroom.

2. What was the average amount of time invested by the evaluator in the examination of a program prior to completing the evaluation form?

28 minutes by students. 40 minutes by teachers.
Both students and teachers were free to stop a program whenever they so desired. However, students did find themselves under the restriction of a time limit set either by the teacher or time allowed in the class period. 6% of the student forms indicated that the student stopped the program before completing it because the student, in his opinion, got bored. 18% of the student forms indicated that the student had to stop and leave the program because they were not allowed enough time.

GRADING THE PROGRAMS

3. After examining the same program for the same amount of time, did the grades given to evaluate the programs differ between teachers who had a great deal of prior experience with programs (ten or more) and teachers who had little prior experience (two programs or fewer)?

Evidence from seventeen programs allowed a comparison of two teacher groups who had similar teaching assignments (same grade level and subject), invested the same amount of time on the evaluation task, and examined the same program, but represented the different extremes in prior microcomputer software experience.

Teachers who indicated experience with ten or more programs prior to the field testing gave significantly higher overall grades and total ratings to the tested programs than teachers with little prior experience. Teachers with "more experience" gave exceptionally higher grades for "this program is likely to arouse student interest," "the content of this program is accurate," and "the instructional approach used (tutorial, drill and practice, simulation, game) suits the program's content." There are a number of attitude related questions which are not answered here. It may be that it is natural for teachers to be conservative in grading materials with which they have not had the opportunity to develop a field of experiences, and thus will not make judgments representing sharp contrasts. The more experienced group tended to give average grades at the "B" level and the less experienced group gave grades which averaged at the "C" level. A possible favorable attitude toward microcomputer software in general may be present in those who have sought out experiences over the months prior to the field testing. This voluntary interest may reflect higher grades when compared to those who have been reluctant to examine this new instructional technology.

4. After examining the same program, and having the same amount of previous experience with microcomputer software, did the grades differ between teachers who invested a great deal of time with the program (over forty minutes) and teachers who invested a minimal amount of time (under 40 minutes)?

Evaluation forms were examined in response to the question where the teacher reported a time investment of forty or more minutes in examination of the program as one group and a second group representing those investing between 15 and 39 minutes. Nineteen programs were evaluated by teachers who had similar microcomputer experience and similar teaching assignments.

Teachers in the group representing a greater time investment indicated an average of 54 minutes spent on the program examination task and the minimal time investment group indicated an average of 25 minutes.

The teachers giving a greater amount of time to the examination of the software prior to completing the evaluation form reported significantly higher grades awarded to the programs and significantly higher overall ratings than the group giving less time to the evaluation process. Teachers investing a greater amount of time gave, on the average, a higher grade by a full point (on a 4.0 scale) to the statement "learner responses require thought and are a challenge" than those teachers investing less time.

Microcomputer software allows the evaluator to yield to some temptations very early in the program examination. If the teacher can sense that the program is not "up to his standards or interest" then stepping out of the program very early is easy to do. On the other hand, if the teacher seems to sense some merit in the program during the first ten to fifteen minutes, he may be encouraged to continue and invest a greater amount of time before making a final judgment. The question which should be raised however is, "How much bias does the evaluator carry into the evaluation process?" If the teacher has already judged the subject matter addressed by the program, for example, how does this effect the willingness of the teacher to carry through with the evaluation task?

In only one area involving the grading of the programs did the group investing more time on the task grade the program lower than the group investing less time. Those giving their time to examination of the program may have also given greater time to the examination of teacher guides and supporting documents. The higher time investment group graded "documents and printed guides give sufficient support" lower by .41 of a grade point.

5. When a teacher rated a program exceptionally high (90+) what areas of the graded criteria related to that high rating?

   A total of 29 programs had at least one teacher evaluation in which the teacher gave the program an overall rating of 90 or more. In cases where more than one teacher gave an exceptionally high rating, the evaluations were averaged. The average rating of these 29 programs was an exceptionally high 93.

   Exceptionally higher grades were given to these programs in the following areas:
   "This program is likely to arouse student interest"
   "Verbal and graphic information is well paced and clear"
   "Relevant practice or testing is consistently provided"
   "Feedback (knowledge of correct response) is consistent and provides remediation"
   "Learner responses require thought and are a challenge"

   Specific strengths noted most often by teachers giving exceptionally high ratings included:
   "challenging" "stimulating" "allows for different ability levels"

6. When a teacher rated a program exceptionally low (60-) what areas of the graded criteria related to that low rating?

   A total of 24 programs had at least one teacher evaluation in which the teacher gave the program an overall rating of 60 or less. In cases where more than one teacher gave an exceptionally low rating, the evaluations were averaged. The average rating of these 24 programs was an exceptionally low 39.

   Exceptionally lower grades were given to these programs in the following areas:
   "This program meets its own stated objectives"
   "This program is suited for its intended grade level"
   "This program is likely to arouse student interest"
   "Verbal and graphic information is well paced and clear"
   "This program provides sufficient review without unnecessary redundancy"
   "Learner responses require thought and are a challenge"

   Specific weaknesses noted most often by teachers giving exceptionally low ratings included:
   "boring" "too much repetion" "no help if wrong answer given" "incorrect information"

   Two statements which had the least effect on either of the rating extremes were.
   "Documents and printed guides give sufficient support"
   "The program provides a clear evaluation of the student's performance"

7. After experiencing the same program for a similar amount of time, was there any difference in the percentage of agreement to the given criteria statements between students who had experience with more microcomputer programs (five or more) prior to the field testing than those students, from the same age group, who have no prior experience?

   Twelve programs generated a high enough student population to make this comparison. For 16 of the 17 statements, there was no significant difference between the two groups.

   One statement, "I would rather work on this program by myself than with other classmates" generated a significant difference as those student who had no prior experience with microcomputer programs indicated a higher percentage of group agreement with the statement. Even though other evidence from this analysis seems to suggest that students who work with a microcomputer program alone get lost more often than those who work with a peer (question 11), it may be a natural attitude to want to explore new areas on one's own without others witnessing our mistakes.

8. After experiencing the same program and having a similar amount of prior experience with microcomputer software, was there any difference in the percentage of agreement to the given criteria statements between students who spent a great deal of time with the program (thirty or more minutes)and those, from the same age group, who spent a minimal amount of time?

   Eight programs allowed for a large enough student pool to test this question. Students who invested an above average amount of time with the program prior to completing an evalaution form averaged 38 minutes on the task. The average of the group investing a minimal amount of time (never less than 15 minutes) was 18 minutes.

   A significantly higher group percentage agreement was given for the following statements from the students investing over thirty minutes with the program:
   "I'd like to do this program again."
   "This program helped me when I made a mistake."
   "Compared to the other times I have studied this subject, this program was fantastic."
   "I would like to be graded by my teacher on the work I did with this program."
   "If I could, I would take this program home to use it."

   Students who spent more than thirty minutes examining their program also gave significantly higher overall ratings. It could be suggested here that students who have the impression that a program is providing help and guidance as the student progresses through the software will tend to spend more time with the program and rate it highly. It should be noted that the statement, " The graphics were helpful" did not generate any difference in opionion between these two groups.

   One statement received a significantly higher group percentage agreement from students who invested a minimal amount of time in the software:
   "This program was a waste of my time."

9. When students rated a program exceptionally high (90+), with which given criteria statements did a high percentage of the group agree?

   Student evaluation forms from 43 programs generated a matching of student exceptionally high and low ratings. The average exceptionally high rating was 96. Students giving these ratings reflected a high group percentage agreement with the following statements:
   "I'd like to do this program again."
   "The pictures (graphics) were helpful."
   "Compared to all the other times I have studied this subject, this program was fantastic."
   "If I could, I would take this program to use it."
   "I think my friends would enjoy this program."
   In this case, there is a tendency to use "helpful graphics" as an element to generate a high favorable rating. "Helpful graphics" may not necessrily increase the amount of time spent with the program (see question 8).

10. When students rated a program exceptionally low (60-), with which given criteria statements did a high percentage of the group agree?

    From the same group of programs (see question 9) matching student evaluations were located with similar time on task and experience levels. Students who rated the program exceptionally low (60 or less) from these 43 programs gave an average rating of 42 as a group. This group reflected an exceptionally high agreement percentage with the following statments:
    "This program was a waste of my time."
    "This program was too long."

11. Was there any difference in the percentage of group agreement with the given criteria statements among student evaluators who examined a given program alone, with one other student, or with two or more students?

    Data for this question was gathered during the second year of the project. Only five programs generated enough evaluation forms for analysis. Student groups were matched to the same program and each group retained similar age groupings, time on task levels, and prior experience levels. In only one area was a siginificant difference found. Students who examined a program alone had a significantly higher group percentage agreement with the statement, "I got lost in this program and didn't know what to do," than the groups working in pairs.

12. Was there any difference between teacher and student ratings of the same program?

    75 was the average overall rating given to a program by students.

    74 was the average overall rating given to a program by teachers.

    Even though the average rating given by students and teachers was very close, there is no correlation between student overall average ratings and teacher overall ratings. Spearman's rank order correlation coefficient was applied to 34 programs in which at least 12 students and two teachers had completed evaluation forms ($r_s = .22$). Teachers and students were looking for different merits in a microcomputer program.

    Simulations involving a team effort and a great deal of time seemed to receive much higher ratings from students. "Helpful graphics" seemed to also influence high student ratings. Teachers tended to rate much higher than did students programs which were tutorials matching to established curriculum.

RECOMMENDATIONS OF SOURCES FOR COMPUTER SOFTWARE

The following section contains the names and addresses of many of the microcomputer vendors contacted during this project. In most cases, the local distributors were very willing to assist us and we have included specific names for Indianapolis area individuals with which you should feel free to make contact.

Acquiring microcomputer programs, because it is such a new & "unstable" technology, is a very time consuming process. Gloria Haycock was in contact with over 300 microcomputer program authors, cottages, warehouses, and vendors during this two-year project. Her impressions of service from these vendors have been summarized in the following pages. An "excellent" rating indicates this vendor was willing to service us promptly and allowed up to 60 to 90 days for previewing the software. "Good" and "Fair" ratings indicate those vendors or producers who were willing to provide programs, but placed restrictions on the preview period; usually not more than 30 days. In some cases, vendors are noted as being "very slow" because their response to our first request for programs was not confirmed for several months. Those receiving "poor" notation were vendors who failed to provide any agreeable service arrangement which would allow our schools to preview and evaluate the program the vendors distribute.

It should be kept in mind that these ratings are based on service from September 1983 to April 1985 and the quality of service will change with time, management and your own working relationship with the vendor.

The information on the following pages identifies vendors, producers, local sales representatives, and qualifies the service of the company. A "Y" means yes and "N" means no.

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COMPANY	VEN	PROD	P/OA	SERVICE	SALES REP
AMERICAN MICRO MEDIA P O BOX 306 RED HOOK NY 12571	Y	N	Y	VERY SLOW JOBBER/GOOD SELECTION IF CAN AFFORD TO WAIT	
AQUARIUS INDIAN BEACH ROCKS FLORIDA 33535	Y	Y	Y	EXCELLENT	
AV SYSTEMS INC P O BOX 49210 LOS ANGELES CA 90049	Y	Y	Y	EXCELLENT	
BECKLEY-CARDY 2917 FIFTEENTH ST COLUMBUS IN 47201	Y	N	Y	EXCELLENT WORK THROUGH REP IN YOUR LOCAL FOR BEST RESULTS	BRAD GRAYSON
BORG-WARNER ED SYSTEMS 600 W UNIVERSITY DR ARLINGTON HEIGHTS IL	N	Y	N	NONE RECEIVED NO CORRESPONDENCE	
CAREER AIDS INC 20417 NORDHOFF ST DEPT 7 CHATSWORTH CA 91311	Y	N	Y	EXCELLENT	
CAREERS INC P O BOX 135 LARGO FL 34294	Y	Y	Y	V GOOD	
CAROLINA BIOL SUPPLY CO 2700 YORK RD BURLINGTON NC 27215	Y	Y	Y	EXCELLENT	
CHARLES CLARK CO INC 168 EXPRESS DR SOUTH BRENTWOOD NY 11717	Y	N	Y	EXCELLENT	MARY DECKER
COMPUTER WORKS 910 S RANGELINE RD CARMEL IN 46032	Y	N	N	NONE PREFERS CUSTOMER CALL AT STORE FOR DEMONSTRATION	
CONTROL DATA CORP P O BOX 261127 SAN DIEGO CA 92126	Y	Y	Y	EXCELLENT	
D C HEATH ED SOFTWARE 2700 NO RICHARDT AVE INDIANAPOLIS IN 46219	Y	Y	Y	EXCELLENT 1-800-428-8071 FOR ASSISTANCE	VALMA DAY
EAV/ED AUDIO VISUALS PLEASANTVILLE NY 10570	Y	Y	Y	EXCELLENT	

COMPANY	VEN	PROD	P/OA	SERVICE	SALES REP
EDUCATIONAL ACTIVITIES IN P O BOX 392 FREEPORT NY 11521	Y	Y	Y	EXCELLENT MODULAR EDUCATIONAL PROGRAMS - REP IN INDIANA	
EDUCATIONAL COURSEWARE 3 NAPPA LANE WESTPORT CT 06880				NONE	
EMC PUBLISHING 300 YORK AVE ST PAUL MN 55101	Y	Y	Y	EXCELLENT	
ESSERTIER SOFTWARE CORP 1020 MANHATTAN BEACH BLVD MANHATTAN BEACH CA 90266	Y	Y	Y	EXCELLENT	
FOCUS MEDIA INC 839 STEWART AVE GARDEN CITY NY 11530	Y	Y	Y	EXCELLENT	
FOLLETT LIBRARY BOOK CO 4506 N W HIGHWAY CRYSTAL LAKE IL 60014	Y	Y	Y	NONE NO RESPONSE TO ON APPROVAL/PREVIEW REQUEST	
GAMCO INDUSTRIES INC P O BOX 1911 BIG SPRING TX 79720	Y	N	Y	EXCELLENT	
GESSLER PUBLISHING CO 900 BROADWAY NEW YORK NY .0003	Y	N	Y	EXCELLENT	
HADDEN COMPANY 2954 STREAMSIDE COURT COLUMBUS IN 47203	Y	Y	N	NONE SMALL COMPANY DOES NOT ALLOW PREVIEW	
HARTLEY 123 BRIDGE DIMONDALE MI 48821	Y	Y	Y	EXCELLENT AVAILABLE THROUGH LOCAL REPRESENTATIVES	SANDRA NOLAN/KELSO/MARBAUGH
HAYDEN SOFTWARE 600 SUFFOLK ST LOWELL MA 01853	N	Y	N	NONE ORDER SENT THROUGH BECKLEY CARDY	
HERFF JONES 307 LEXINGTON BLVD CARMEL IN 46032	Y	Y	Y	NONE SCHOOL REP PROVIDES SOFTWARE	
HOFFMAN ED SYSTEMS 1720 FLOWER AVE DUARTE CA 91010	Y	Y	Y	EXCELLENT	

COMPANY	VEN	PROD	P/OA	SERVICE	SALES REP
HRM SOFTWARE 175 TOMPKINS AVE PLEASANTVILLE NY 100570	Y	Y	Y	EXCELLENT	
ISLAND SOFTWARE BOX 300 LAKE GROVE NY 11755	Y	Y	Y	EXCELLENT PROVIDED FREE SOFTWARE	
J & S SOFTWARE 140 REID AVE PORT WASHINGTON NY 10050	Y	Y	Y	EXCELLENT AVAILABLE THROUGH DISTRIBUTORS	
JAMES G LENGELY RFD 1 WILLIAMSTOWN VT 05679	N	Y	N	SEE ORONOQUE COMPUTER CONCEPTS	
JOSTEN 140 NAPANEE DRIVE CARMEL IN 46032	Y	Y	Y	NONE SCHOOL REP PROVIDES SOFTWARE	
KELSO INC 116 SO WALNUT MUNCIE IN 47305	Y	N	Y	EXCELLENT LIKES TO BRING IN SOFTWARE ANDDEMONSTRATE	CANDY JONES
LEARNING ARTS P O BOX 179 WITCHITA KANSAS 67201	Y	N	Y	EXCELLENT	
M C MEDIA 4502 SUDBURY RD ATLANTA GA 30362	Y		Y	EXCELLENT	
MARBAUGH 601 N CAPITOL INDIANAPOLIS IN 46204	Y	N	Y	EXCELLENT CATALOG OF SOFTWARE	LESLIE HAY
MATH-MASTER BOX 310J7 BIG SPRING TX 79721	N	Y	N	NONE SEE GAMCO	
MCE INC 157 S KALAMAZOO MALL KALAMAZOO MI 49007	Y	Y	Y	EXCELLENT AVAILABLE THROUGH JOBBERS	
MCGRAW-HILL BOOK COMPANY 1221 AVE OF THE AMERICAS NEW YORK NY 10020	Y	Y	Y	EXCELLENT	
MICRO CENTER P O BOX 6 PLEASANTVILLE NY 10570	Y	N	Y	EXCELLENT	

COMPANY	VEN	PROD	P/OA	SERVICE	SALES REP
MICRO LEARNINGWARE P O BOX 307 MANKATO MN 56002	Y	Y	Y	EXCELLENT	
MICRO POWER AND LIGHT 12820 HILLCREST RD #219 DALLAS TX 75230	Y	Y	Y	EXCELLENT	
MICROTEACH 2707 LEER ST SOUTH BEND IN 46614	Y	N	Y	EXCELLENT COMMODORE SOFTWARE	LEAH SILVER
MIDWEST VISUAL EQUIP CO 6500 N HAMLIN CHICAGO IL 60645	Y	Y	Y	GOOD PREVIEW ONLY ON APPLE SOFTWARE	
MODULAR EDUC PROGRAMS BOX 100 VINE ROAD TYNER IN 46572	Y	N	Y	EXCELLENT ASSISTS IN LOCATING SOFTWARE/REPS FOR ED ACT	SARAH & STERLING DAVIS
OPPORTUNITIES FOR LEARN'G 20417 NORDHOFF ST CHATSWORTH CA 91311	Y	Y	Y	EXCELLENT	
ORANGE JUICE SOFT SYSTEMS 222 SO WASHINGTON AVE NEW RICHMOND WISC 54017	Y	Y	Y	EXCELLENT	
ORONOQUE COMPUTER CONCEPT RFD #1 WILLIAMSTOWN VT 05679	N	Y	Y	GOOD	
SCHOLASTIC SOFTWARE 902 SYLVAN AVE ENGLEWOOD CLIFFS NJ 07632	Y	Y	Y	GOOD JOBBERS SOMETIMES FASTER	CAROLYN IARIA
SIERRA ON-LINE INC 36575 MUDGE RANCH RD CORSEGOLD CA 93614					
SLIWA ENTERPRISES P O BOX 7266 HAMPTON VA 23666	Y	Y	Y	EXCELLENT	
SLOSSON EDUCATIONAL PUBL P O BOX 280 EAST AURORA NY 14052	Y	Y	Y	EXCELLENT GOOD SOURCE FOR TI MATERIALS	
SOCIAL STUDIES SCH SERV P O BOX 802 CULVER CITY CA 90230	Y	N	Y	EXCELLENT	

COMPANY	VEN	PROD	P/OA	SERVICE	SALES REP
SOUTHWESTERN PUBL CO 5101 MADISON RD CINCINNATI OH 45227	Y	Y	Y	EXCELLENT	
SUNBURST COMMUNICATIONS 39 WASHINGTON AVE PLEASANTVILLE NY 10570	Y	Y	Y	EXCELLENT SOFTWARE AVAILABLE THROUGH MANY DISTRIBUTORS	
SVE 1345 DIVERSEY PARKWAY CHICAGO IL 60614	Y	Y	Y	EXCELLENT	JIM FORBES
TOTAL INF ED SYSTEMS 1925 WEST COUNTY RD B2 ST PAUL MN 55113			Y	GOOD LIMIT ON PREVIEW TIME	
TROLL MICRO 320 RT 17 MAHWAH NJ 07498	Y	N	Y	EXCELLENT	
WALCH, J WESTON BOX 658 PORTLAND ME 14104	Y	Y	Y	EXCELLENT	

COPIES OF OUR REVISED EVALUATION FORMS ARE GIVEN ON THE LAST PAGES SO THAT YOU CAN PHOTOCOPY AND USE THEM.

PLEASE FEEL FREE TO REVISE THE FORMS AS YOU SEE NECESSARY.

LET US KNOW ABOUT YOUR OWN FIELD TESTING AND PREVIEWING OF MICROCOMPUTER SOFTWARE.

MOST OF ALL, LET YOUR NEIGHBORING SCHOOLS KNOW ABOUT THE RESULTS OF YOUR FIELD TESTING.

TEACHER microcomputer software evaluation

YOUR NAME : _____ SCHOOL : _____

PROGRAM TITLE : _____ Date : _____
If there is more than one program on the disk or tape, complete a form for each new program.

Your teaching subject area and grade level : _____

If you have never worked with an educational microcomputer program before, it will be worth your time to examine at least two other programs before completing a written evaluation on the program you are previewing or field testing. Simply ask your school media specialist for two other programs, hopefully relevant to the same grade level and subject area of the program you will evaluate, and spend about 15 minutes examining each program. Also examine the study guides or other printed materials which come with each program.

To complete a written evaluation of a microcomputer program, plan to give at least 40 minutes to the examination of the program itself and about 20 minutes to the completion of this form. As you examine the program, consider not only your expectations as a teacher, but also how students might approach the program. Test for the program's response to incorrect answers as well as correct ones. Does the program give guidance and assistance?

Before you start any program read the supporting documentation, study guide or directions provided. Before you start the program, check one of the following:

a.____I am evaluating this program for possible utilization in a class I am teaching.

b.____I am evaluating this program to provide an additional teacher's (or adult's) opinion, but the content of the program does not relate to any course I currently teach.

Before you start the program, read the following statements. After you have progressed into the program, return to these statements to give your response.

c.____I stopped working with this program before the minimum of 40 minutes because it does not interest me.
(if you checked this statement do not complete the rest of the form)

d.____I stopped working with this program before the minimum of 40 minutes because its drill and practice format can be tested in only 15 to 20 minutes, and I feel most of the possible options of the program can be seen within this shorter time limit.
(if you checked this statement and you feel ready to complete this form, proceed)

e.____I have examined the program for at least 40 minutes; or if more than 40, how long? _____.
(if you checked this statement and you feel ready to complete this form, proceed)

GRADING THE PROGRAM

I. For each of the following statements, grade the program. High (circle one) Low

1. This program meets its own stated objectives.	1.	A	B	C	D	F	Doesn't Apply
2. This program is suited for its intended grade level.	2.	A	B	C	D	F	DA
3. This program is likely to arouse student interest.	3.	A	B	C	D	F	DA
4. The content of this program is accurate.	4.	A	B	C	D	F	DA
5. Verbal information is well paced and clear.	5.	A	B	C	D	F	DA
6. Graphics are well paced and clear.	6.	A	B	C	D	F	DA
7. This program provides sufficient review without unnecessary redundancy.	7.	A	B	C	D	F	DA
8. Relevant practice and clear examples are provided.	8.	A	B	C	D	F	DA
9. Feedback (knowledge of correct response) is consistent and provides remediation.	9.	A	B	C	D	F	DA
10. Learner responses require "thought" and are a "challenge."	10.	A	B	C	D	F	DA
11. The instructional approach used (tutorial, drill & practice, simulation or game) suits the content.	11.	A	B	C	D	F	DA
12. Documents or printed guides give sufficient support.	12.	A	B	C	D	F	DA
13. The program provides clear evaluation of the student's performance.	13.	A	B	C	D	F	DA

(over)

II. Check any of the following phrases or terms which represent major STRENGTHS of this program. _____"none"
_____"motivating" _____"challenging" _____"excellent graphics" _____"excellent vocabulary"
_____"provides good drill and review" _____"easy and fun" _____"allows for a variety of skill levels"
_____"clear directions" _____"clear record of student's performance" _____"accurate content"
_____"content relevant to curriculum" _____"content relevant to 'real world situations'"
_____"students interact as a team to work the program" _____"supports individualized instruction"
_____"can reenter program at various points without reviewing previous or unwanted programming"
_____"other" :

III. Check any of the following phrases or terms which represent major WEAKNESSES of this program. _____"none"
_____"poor, unclear directions" _____"content not accurate" _____"boring" _____"poor graphics"
_____"pacing is very slow" _____"no control over revision of content" _____"too difficult for intended age"
_____"not really very challenging" _____"unable to control skill level" _____"provides drill only"
_____"forced to repeat previously completed program portions when reentering" _____"teacher must restart"
_____"does not match or support curriculum" _____"fails to give feedback for clear remediation"
_____"other" :

IV. What specific unit of study would this program support? How would the program be used? _____"none"

V. List specific skills which would be supported by this program. _____"none"

VI. Have you examined other microcomputer programs similar in content (with similar objectives)? YES NO
If yes, give the title:

Of these programs, which do you feel has more educational value for your students? Note reasons.

VII. Do you want the media specialist to request preview of additional programs which cover the same objectives and purpose as this program you are evaluating? YES NO
If yes, can you suggest titles? Can you suggest materials other than microcomputer programs?

VIII. Place a check to the left of any of the following statements with which you agree regarding this program.

_____f. The current noncomputerized materials provide an adequate presentation for my students without the use of this microcomputer program.

_____g. This microcomputer program supports and enhances my current instructional materials and would provide enhancement to instruction of the skills I require of my students.

_____h. This microcomputer program introduces a new content area and additional skills not currently required of my students. It is essential to have this program to support these new skills in the classroom.

IX. Place a check to the left of any phrase which reflects your opinion concerning purchase of this program.
_____"highly recommend purchase" _____"recommend purchase" _____"recommend purchase with reservations"
_____"do not purchase" _____"purchase only certain portions: _____"
_____"recommend purchase of more than one copy" _____"recommend purchase of agreement to duplicate"
_____"don't know; need additional information or opinions before I can decide on purchase"
_____"would like to see other programs or consider other materials before I decide on purchase"
The following person should also evaluate this program:

X. Overall, on a scale of "0" (lowest) to "100" (highest), I rate this microcomputer program as _____.

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This evaluation form was developed and tested by school corporations in Indiana from 1983-85, and was supported by funds made possible from the Lilly Endowment Inc. For more information, contact Daniel Callison, School of Library and Information Science, Indiana University, Bloomington, IN 47405; or Gloria Haycock, Northwestern Consolidated School District of Shelby County, RR 1, Fairland, IN 46126.

STUDENT microcomputer software evaluation

PROGRAM TITLE : _____ Date : _____

If there is more than one program on the disk or tape, complete a form for each new program.

Student's current grade level : _____ and age : _____

If you have never worked with an educational microcomputer program before, take some time before evaluating this program to examine at least two other programs. Have a friend who has experience with microcomputer programs help you get started. After you have spent ten to twenty minutes with each of these first two programs (in order to gain some experience with the equipment) you may move on to the evaluation of the program given to you and the completion of this form.

After you have spent at least 30 minutes working with the program given to you to evaluate, you may stop the program and read through the questions given below. If you feel that you have completed the program, you may respond to the questions. You may, however, take more time to examine the program if your teacher gives you the opportunity. If you have to leave the program before spending at least 30 minutes with it, do not complete the form but wait until you can spend more time with the program.
Read statements a,b,and c before you begin your program.
Check (✓) one of the following statements:

a._____ I stopped working with this program before the minimum 30 minutes because it is too difficult.
(if you checked this statement do not complete the rest of the form)
b._____ I stopped working with this program before the minimum 30 minutes because I got bored.
(if you checked this statement do not complete the rest of the form)
c._____ I have examined the program for at least 30 minutes; or if more than 30, how long? _____.
(if you checked this statement and you feel ready to complete this form, proceed)

For each of the following statements with which you AGREE, place a check (✓) in front of it:

I. 1._____ I'd like to do this program again.

2._____ The graphics were helpful.

3._____ I got lost in this program and didn't know what to do.

4._____ I really had to think in order to get the right answer.

5._____ This program helped me when I made a mistake.

6._____ I got all of the answers right on the first try.

7._____ Compared to the other times I have studied this subject, this program was fantastic.

8._____ I would rather do this program with a classmate than by myself.

9._____ I would like to be graded by my teacher on the work I did with this program.

10._____ If I could, I would take this program home to use it.

11._____ This program was a waste of my time.

12._____ This program lasts too long.

13._____ I think my friends would enjoy this program.

14._____ I could not do this program without help from my teacher.

15._____ This program was too easy for me.

II. On a scale of "0" (lowest) to "100" (highest), I rate this microcomputer program as

_____

(over)

III. Using a statement, drawing, a graph, or any other written means of expression, give below an idea or fact you remember from the program.

IV. What did you LIKE most about the program?

V. What did you DISLIKE most about the program?

******

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